

# SERVICE MANUAL



## P1166 / P1266 / P1266i / P1166P / P1266P

Date	Revise Version	Description
2008.07.29	V1.0	Initial Issue
2009.01.23	V2.0	Add P1266i, P1166P, P1266P

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## P1166 / P1266 / P1266i / P1166P / P1266P Comparison List

PARTS	P1166	P1266	P1166P	P1266P	P1266I
THERMAL SWITCH		43.8BB01G001		43.89J02G001	
LAMP DRIVER		75.8BA01G001		75.8BJ10G001	
LAMP MODULE		SP.8BE01GC01		SP.8BA01GC01	
LAMP COVER		51.8BA06G002		70.8BA24GR01	
DMD	48.87K01G001	48.87M01G001	48.87K01G001	48.87M01G001	
WIRELESS MODULE			NA		75.8BA05G001
MAIN BD MODULE	70.8BE06GR01	70.8BA17GR01	70.8BE08GR01	70.8BA22GR01	70.8BA25GR01
IO COVER MODULE	70.8BE07GR01	70.8BA19GR01	70.8BE09GR01	70.8BA23GR01	70.8BA26GR01

## Preface

This manual is applied to P1166 / P1266 / P1266i / P1166P / P1266P projection system. The manual gives you a brief description of basic technical information to help in service and maintain the product.

Your customers will appreciate the quick response time when you immediately identify problems that occur with our products. We expect your customers will appreciate the service that you offer them.

This manual is for technicians and people who have an electronic background. Please send the product back to the distributor for repairing and do not attempt to do anything that is complex or is not mentioned in the troubleshooting.

*Note:*

*The information found in this manual is subject to change without prior notice. Any subsequent changes made to the data herein will be incorporated in future edition.*

P1166 / P1266 / P1266i / P1166P / P1266P Service Manual

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Manual Version 2.0

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## Chapter 1

# Introduction

## 1-1 Highlight

No	Item	Description
1	Dimensions (W x H x D)	<ul style="list-style-type: none"><li>• 269 x 205.6 x 95.5 mm</li></ul>
2	Weight	<ul style="list-style-type: none"><li>• 2.5 kg</li></ul>
3	Tilt Angle	<ul style="list-style-type: none"><li>• 7 degree with elevator mechanism</li></ul>
4	Power Supply	<ul style="list-style-type: none"><li>• Universal AC 100 – 240 V ~ 50-60 Hz with PFC input</li><li>• 180W for OSRAM E20.8 Lamp @ normal operation</li><li>• Variance FAN speed control (Depends on temperature variant)</li></ul>
5	Keystone correction	<ul style="list-style-type: none"><li>• +/- 40 degree (80 degree)</li></ul>
6	Cooling system	<ul style="list-style-type: none"><li>• Advanced Air Flow</li><li>• Two fans with system acoustic noise level</li><li>• Temperature control circuits with adaptive fan rotational speeds</li><li>• High altitude cooling mode</li><li>• Maximum touch temperature follow UL60950-1</li></ul>
7	Brightness	<p>Engineering spec:</p> <ul style="list-style-type: none"><li>• For P1166 / P1266:<ul style="list-style-type: none"><li>• 2250 ANSI Lumens (Typical; Full power mode)</li><li>• 2000 ANSI Lumens (Minimum; Full power mode)</li></ul></li><li>• For P1266i / P1166P / P1266P :<ul style="list-style-type: none"><li>• 2475 ANSI Lumens (Typical; Full power mode)</li><li>• 2200 ANSI Lumens (Minimum; Full power mode)</li></ul></li></ul> <p>Marketing spec:</p> <ul style="list-style-type: none"><li>• For P1166 / P1266:<ul style="list-style-type: none"><li>• 2500 ANSI Lumens</li></ul></li><li>• For P1266i / P1166P / P1266P :<ul style="list-style-type: none"><li>• 2700 ANSI Lumens</li></ul></li></ul>

No	Item	Description
8	Contrast	<p>Engineering spec:</p> <ul style="list-style-type: none"> <li>• For P1166 / P1266: <ul style="list-style-type: none"> <li>• 1400: 1 Full White and Black (Minimum; Full power mode)</li> <li>• 1800: 1 Full White and Black (Typical; Full power mode)</li> </ul> </li> <li>• For P1266i / P1166P / P1266P : <ul style="list-style-type: none"> <li>• 1900: 1 (Minimum; Full White with full power / full Black with eco power)</li> <li>• 2400: 1 (Typical; Full White with full power / full Black with eco power)</li> </ul> </li> </ul> <p>Marketing spec:</p> <ul style="list-style-type: none"> <li>• For P1166 / P1266: <ul style="list-style-type: none"> <li>• 2000: 1</li> </ul> </li> <li>• For P1266i / P1166P / P1266P : <ul style="list-style-type: none"> <li>• 2500: 1</li> </ul> </li> </ul>
9	Uniformity	<p>Engineering spec:</p> <ul style="list-style-type: none"> <li>• 65% JBMA (Minimum; Full power mode)</li> <li>• 80% JBMA (Typical; Full power mode)</li> </ul> <p>Marketing spec:</p> <ul style="list-style-type: none"> <li>• 90%</li> </ul>
10	Throw ratio	<ul style="list-style-type: none"> <li>• 1.6 – 1.92: 1 distance/width @60"</li> </ul>
11	Audio	<ul style="list-style-type: none"> <li>• One 8-Ohm internal speaker</li> <li>• Output Power: 2 Watts</li> <li>• Input sensitivity 0.5Vrms</li> </ul>
12	Projection lens	<ul style="list-style-type: none"> <li>• F# 2.4 ~2.66, f = 18.2~21.8 mm, 1.2X Mechanical Zoom Lens</li> </ul>
13	Lamp life	<ul style="list-style-type: none"> <li>• 3000 hours, 50% survival rate (Full power Mode)</li> <li>• 4000 hours, 50% survival rate (Eco power Mode)</li> </ul>
14	System controller	<ul style="list-style-type: none"> <li>• TI DDP2230</li> </ul>
15	Terminal	<ul style="list-style-type: none"> <li>• One HDMI Female Terminal</li> <li>• One VGA input ( One D-SUB)</li> <li>• One D-Sub 15-Pin output</li> <li>• One Mini DIN 3-Pin Connector for RS232 control input</li> <li>• Video input (One RCA jack Type, One Mini DIN 4-pin S-video)</li> <li>• Audio input (One Phone jack Type)</li> <li>• One USB (One Type-B)</li> </ul>
16	Lamp housing	<ul style="list-style-type: none"> <li>• Lamp Assembly could be changed by customer himself, but should read the user manual for instruction in advance</li> <li>• Lamp Assembly should be provided by Coretronic and distributed through authorized agencies</li> </ul>

No	Item	Description
17	Input signal spec.	<ul style="list-style-type: none"> <li>● Hsync Frequency 31.5 k ~ 100 kHz</li> <li>● Vsync Frequency 50 ~ 85 Hz</li> <li>● Video Signal RGB (PC) <ul style="list-style-type: none"> <li>• Analog RGB 0.7Vp-p, 75 ohm, Separate TTL H,V Sync</li> <li>• Analog RGB 1Vp-p, 75 ohm, Sync. On Green signal</li> <li>• Analog RGB 0.7Vp-p, 75 ohm, Composite TTL Sync.</li> </ul> </li> <li>● Video <ul style="list-style-type: none"> <li>• Composite video 1Vp-p, 75 ohm</li> <li>• S-video Luminance 0.714Vp-p, 75 ohm</li> <li>• Chrominance 0.286Vp-p, 75 ohm</li> <li>• Component Video 1Vp-p, 75 ohm</li> </ul> </li> </ul>
18	TI DMD	<ul style="list-style-type: none"> <li>● For P1166 / P1166P: <ul style="list-style-type: none"> <li>• TI DMD 0.55" 12° 2xLVDS Type-X SVGA Digital Mirror Device</li> </ul> </li> <li>● For P1266 / P1266i / P1266P <ul style="list-style-type: none"> <li>• TI DMD 0.55" 12° 2xLVDS Type-X XGA Digital Mirror Device</li> </ul> </li> </ul>
19	Number of active dots	<ul style="list-style-type: none"> <li>● For P1166 / P1166P: <ul style="list-style-type: none"> <li>• 800 (H) x 600 (V)</li> </ul> </li> <li>● For P1266 / P1266i / P1266P: <ul style="list-style-type: none"> <li>• 1024 (H) x 768 (V)</li> </ul> </li> </ul>
20	Video compatibility	<ul style="list-style-type: none"> <li>● Standards : <ul style="list-style-type: none"> <li>• NTSC (3.58/4.43)</li> <li>• PAL (B/D/G/H/I/M/N)</li> <li>• SECAM (B/D/G/K/K1/L)</li> <li>• HDTV - 480p, 576p, 720p, 1080P</li> </ul> </li> </ul>
21	XGA / Compression	<ul style="list-style-type: none"> <li>● Compression : <ul style="list-style-type: none"> <li>by using "DDP2230" Chips can make image compression</li> </ul> </li> </ul>
22	Color wheel	<ul style="list-style-type: none"> <li>● 6 segments</li> <li>● 7200 rpm (2X)</li> <li>● 9000rpm@3X PAL 50Hz</li> <li>● 10800 rpm@3X NTSC 60Hz</li> <li>● Segment Angle: R85Y37G90C28W42B78</li> </ul>
23	Lamp	<ul style="list-style-type: none"> <li>● For P1166 / P1266: <ul style="list-style-type: none"> <li>• 180 – Watt OSRAM E20.8 Lamp (user replaceable) dimmable to 150 W</li> </ul> </li> <li>● For P1266i / P1166P / P1266P : <ul style="list-style-type: none"> <li>• 200 – Watt OSRAM E20.8 Lamp (user replaceable) dimmable to 160W</li> </ul> </li> </ul>
24	Temperature	<ul style="list-style-type: none"> <li>● Operating: 5°C ~ 35°C</li> <li>● Storage: -20°C ~ 60°C</li> </ul>

## 1-2 Compatible Mode

### Computer Compatibility (Analog)

Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
VGA	640x480	60	31.50
	640x480	72	37.90
	640x480	75	37.50
	720x400	70	31.50
SVGA	800x600	56	35.20
	800x600	60	37.90
	800x600	72	48.10
	800x600	75	46.90
	832x624	75	49.725
XGA	1024x768	60	48.40
	1024x768	70	56.50
	1024x768	75	60.00
SXGA	1280x1024	60	63.98
	1280x1024	75	79.98
QuadVGA	1280x960	60	59.70
	1280x960	60	59.70
SXGA+	1400x1050	60	63.98
WXGA	1280x800	60	49.702
	1280x720	60	45.00
	1440x900	60	55.935
	1280x800	60	49.702
UXGA	1600x1200	60	75.00
Power Mac G4	640x480	66.6(67)	34.93
	800x600	60	37.90
	1024x768	60	48.40
	1152x870	75	68.68
PowerBook G4	640x480	60	31.35
	640x480	66.6(67)	34.93
	800x600	60	37.90
	1024x768	60	48.40
	1152x870	75	68.68
i Mac DV(G3)	1024x768	75	60.00

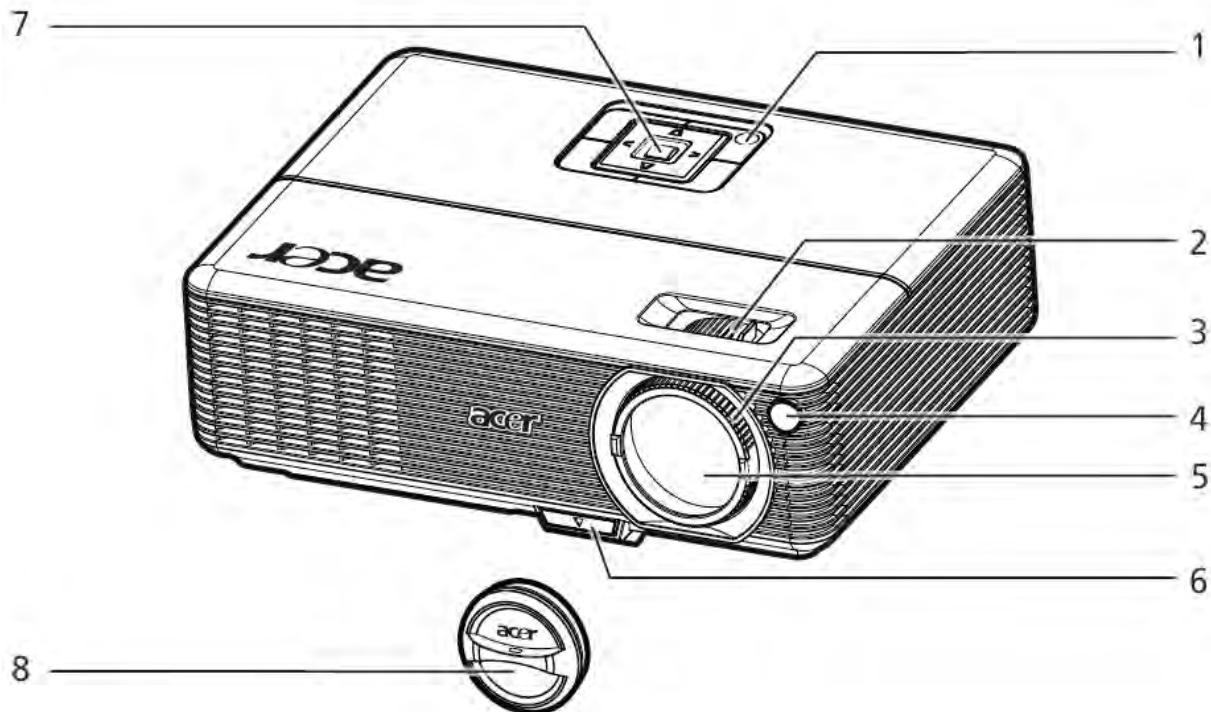
## Computer Compatibility (Digital)

Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
VGA	640x480	60	31.50
	640x480	72	37.90
	640x480	75	37.50
	720x400	70	31.50
SVGA	800x600	56	35.20
	800x600	60	37.90
	800x600	72	48.10
	800x600	75	46.90
	832x624	75	49.725
XGA	1024x768	60	48.40
	1024x768	70	56.50
	1024x768	75	60.00
SXGA	1280x1024	75	79.98
	1280x1024	60	63.98
QuadVGA	1280x960	60	59.70
	1280x960	75	75.23
SXGA+	1400x1050	60	63.98
WXGA	1280x800	60	49.702
	1440x900	60	55.935
	1680x1050	60	65.290
UXGA	1600x1200	60	75.00
Power Mac G4	640x480	66.6(67)	34.93
	800x600	60	37.90
	1024x768	60	48.40
	1152x870	75	68.68
	1280x1024	60	63.98
PowerBook G4	640x480	60	31.35
	640x480	66.6(67)	34.93
	800x600	60	37.90
	1024x768	60	48.40
	1152x870	75	68.68
	1280x1024	60	63.98
i Mac DV(G3)	1024x768	75	60.00

# Product Overview

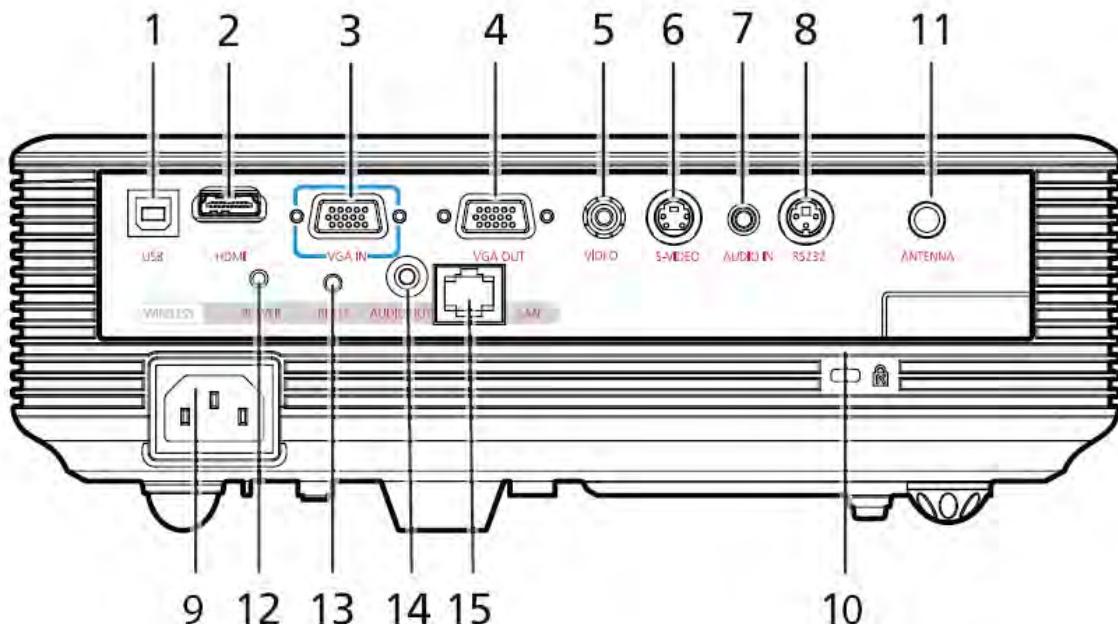
## Projector Outlook

### Front /Upper side



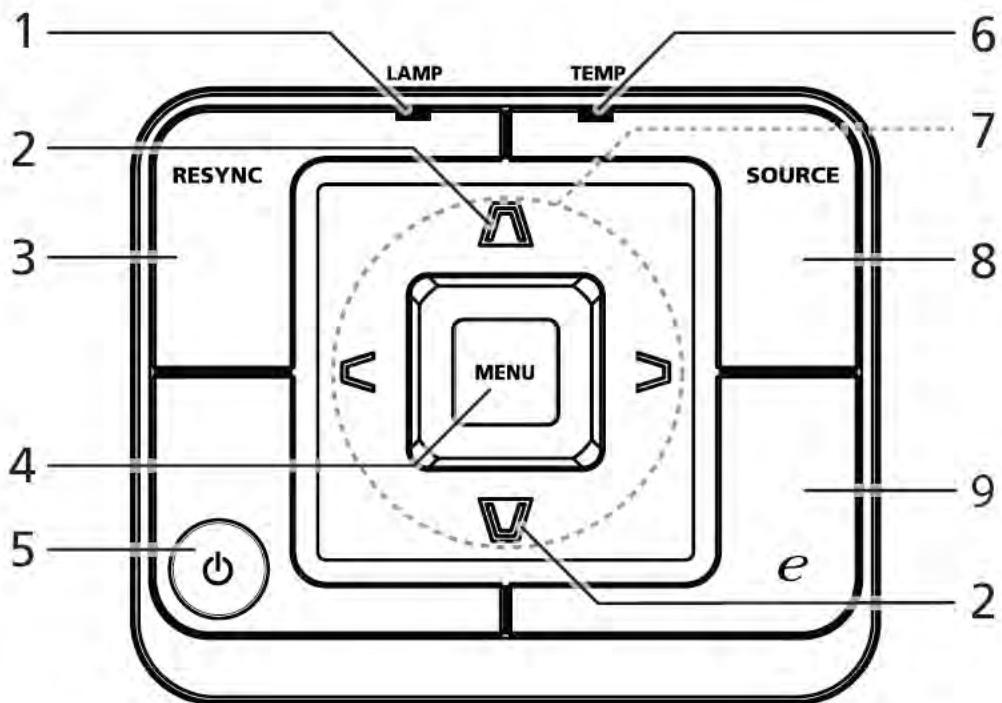
Item	Description	Item	Description
1	Power button	5	Zoom lens
2	Zoom ring	6	Elevator foot
3	Focus ring	7	Control panel
4	Remote control receiver	8	Lens cap

## Rear side



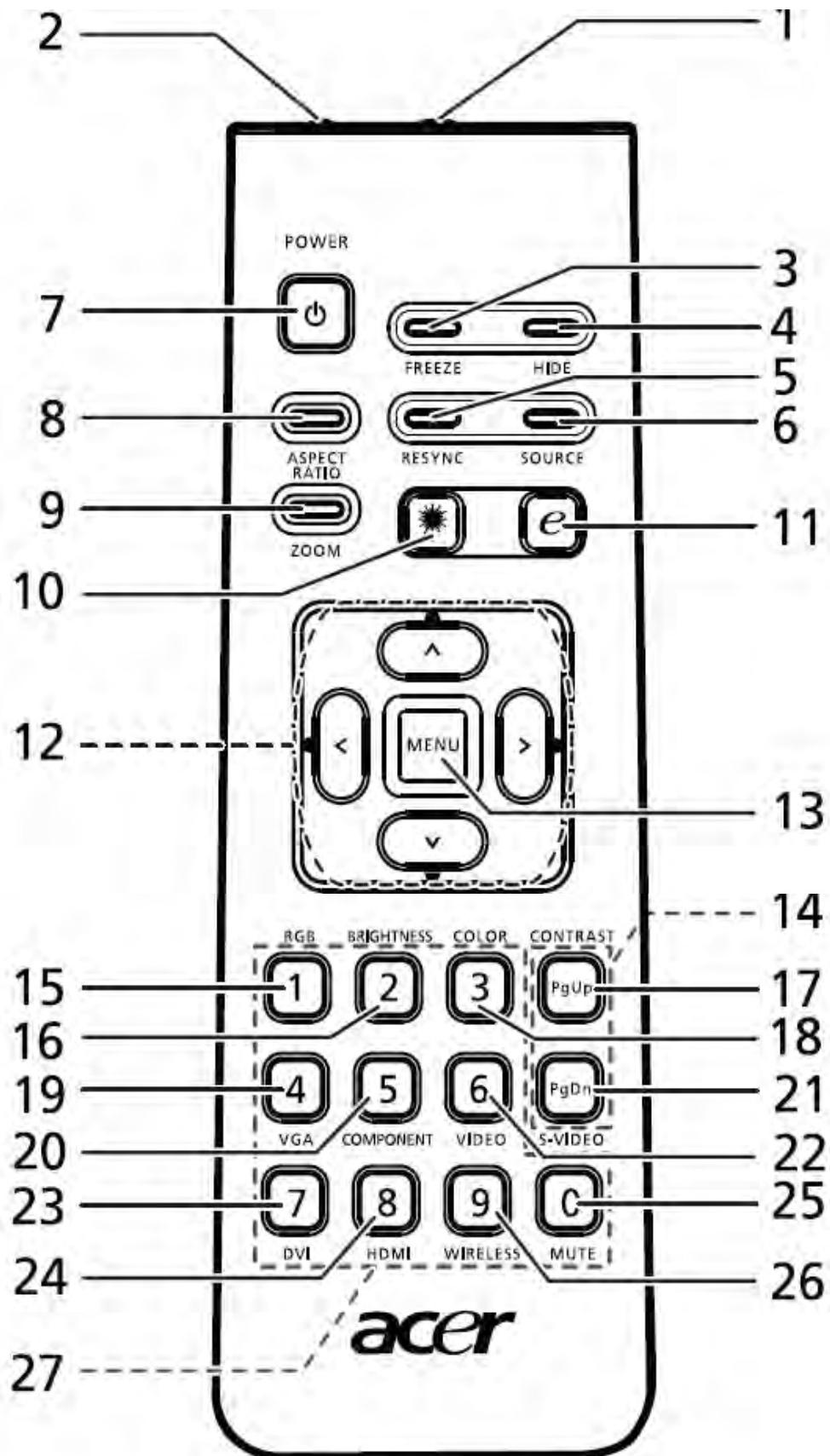
Item	Description	Item	Description	
1	USB connector	9	Power socket	
2	HDMI connector	10	Kensington™ lock port	
3	PC analog signal/HDTV/component video input connector (VGA IN )	Below items are for P1266i series only:		
4	Monitor loop-through output connector (VGA-Out)	11	Antenna	
5	Composite video input connector	12	Power LED for wireless	
6	S-Video input connector	13	Reset button	
7	Audio input connector	14	Audio output connector for wireless	
8	RS232 connector	15	Lan (RJ45 Port for 10/100M Ethernet)	

## Control Panel



Item	Function	Description
1	LAMP	Lamp Indicator LED
2	KEYSTONE	Adjusts the image to compensate for distortion caused by tilting the projector.
3	RESYNC	Automatically synchronizes the projector to the input source.
4	MENU	<ul style="list-style-type: none"> <li>Press “MENU” to launch the Onscreen display (OSD) menu, back to the previous step for the OSD menu operation or exit the OSD menu.</li> <li>Confirm your selection of items.</li> </ul>
5	POWER	See the contents in “Turning the Projector On/Off” section.
6	TEMP	Temp Indicator LED
7	FOUR DIRECTIONAL SELECT KEYS	Use to  select items or make adjustments to your selection.
8	SOURCE	Press “SOURCE” to choose RGB, Component, SVideo, Composite, HDTV and HDMI™ sources.
9	EMPOWERING KEY	Unique Acer functions: eOpening, eView, eTimer,ePower Management.

## Remote Control Layout



Item	Icon	Function	Description
1		INFRARED TRANSMITTER	Sends signals to the projector.
2 (#)		Laser pointer	Aim the remote at the viewing screen.
3		FREEZE	To pause the screen image.
4		HIDE	Momentarily turns off the video. Press "HIDE" to hide the image, press again to display the image.
5		RESYNC	Automatically synchronizes the projector to the input source.
6		SOURCE	Press "SOURCE" to choose from RGB, Component-p, Component-i, S-Video, Composite, Video and HDTV sources.
7		POWER	Refer to the "Turning the Projector On/Off" section.
8		ASPECT RATIO	To choose the desired aspect ratio (Auto/4:3/16:9)
9		ZOOM	Zooms the projector display in or out.
10(#)		LASTER BUTTON	Aim the remote at the viewing screen, press and hold this button to activate the laser pointer. This function is not supported in Japanese market.
11		EMPOWERING KEY	Unique Acer functions: eOpening, eView, eTimer, ePower Management.
12		KEYSTONE	Adjusts the image to compensate for distortion caused by tilting the projector ( $\pm 40$ degrees).
12		FOUR DIRECTIONAL SELECT KEYS	Use up, down, left, right buttons to select items or make adjustments to your selection.
13		MENU	<ul style="list-style-type: none"> <li>Press "MENU" to launch the Onscreen display (OSD) menu, back to the previous step for the OSD menu operation or exit the OSD menu.</li> <li>Confirm your selection of items.</li> </ul>
14		PAGE	For computer mode only. Use this button to select the next or previous page. This function is only available when connected to a computer via a USB cable.
15		RGB	Press "RGB" for true-color optimization.
16		BRIGHTNESS	Press "BRIGHTNESS" to adjust the brightness of the image.
17		CONTRAST	Use the "CONTRAST" option to control the difference between the lightest and darkest parts of the picture.

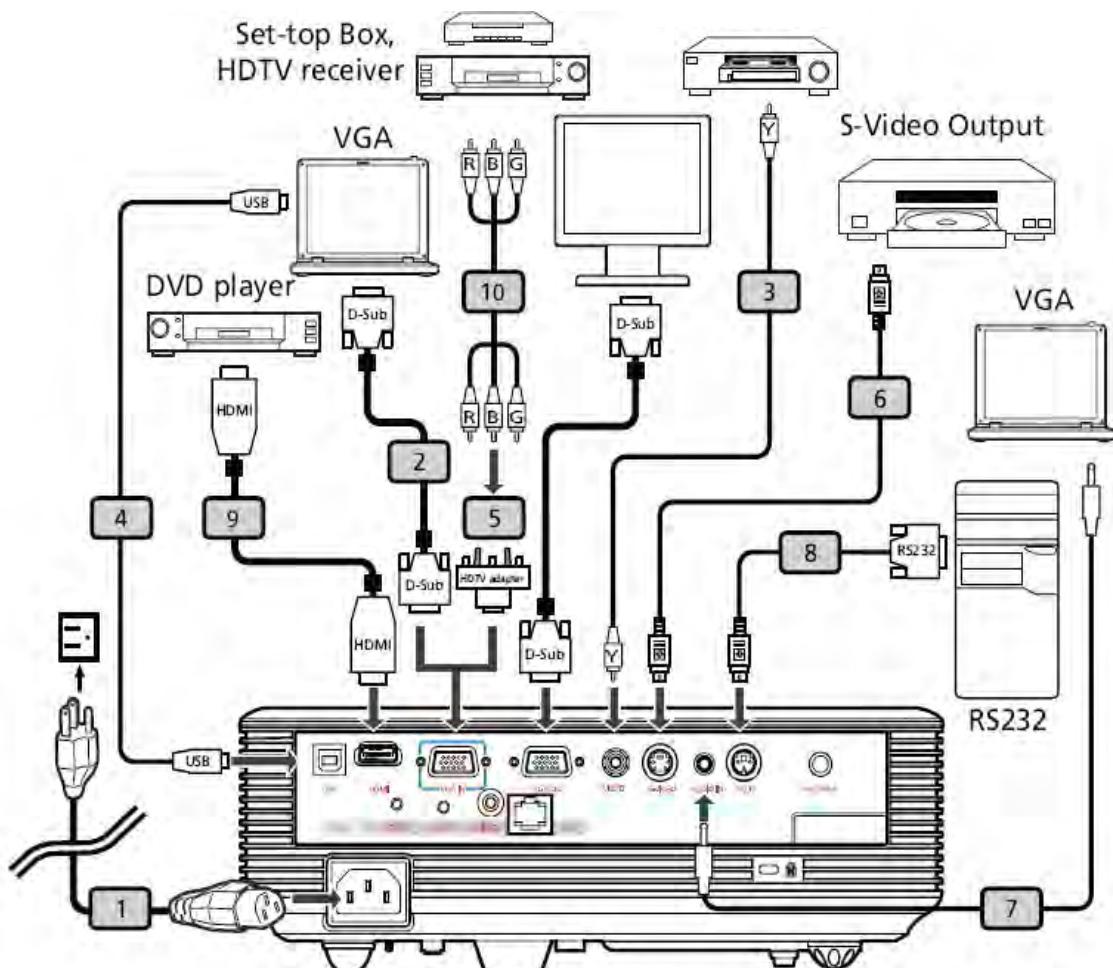
Item	Icon	Function	Description
18		COLOR	Press “COLOR” to adjust the color temperature of image.
19		VGA	Press “VGA” to change source to the VGA connector. This connector supports analog RGB, YPbPr (480p/576p/720p/ 1080i), YCbCr (480i/576i) and RGBsync.
20		COMPONENT	Press “COMPONENT” to change source to Component video. This connection supports YPbPr (480p/576p/720p/1080i) and YCbCr (480i/576i).
21		S-VIDEO	To change source to S-Video.
22		VIDEO	To change source to COMPOSITE VIDEO.
23		DVI	No function.
24		HDMI™	To change source to HDMI™. (for the model if with HDMI™ connector)
25		MUTE	To turn on/off the volume.
26		WIRELESS	Press “WIRELESS” to display the image which is wirelessly transmitted from the PC to the projector via the “Acer eProjection Management” utility. (for wireless model)
27		KeyPad 0~9	Press “0~9” to input a password in the “Security”.



Note: “\*” Only for P1266i series, “#” Japan area is not supported.



## Connecting the Projector

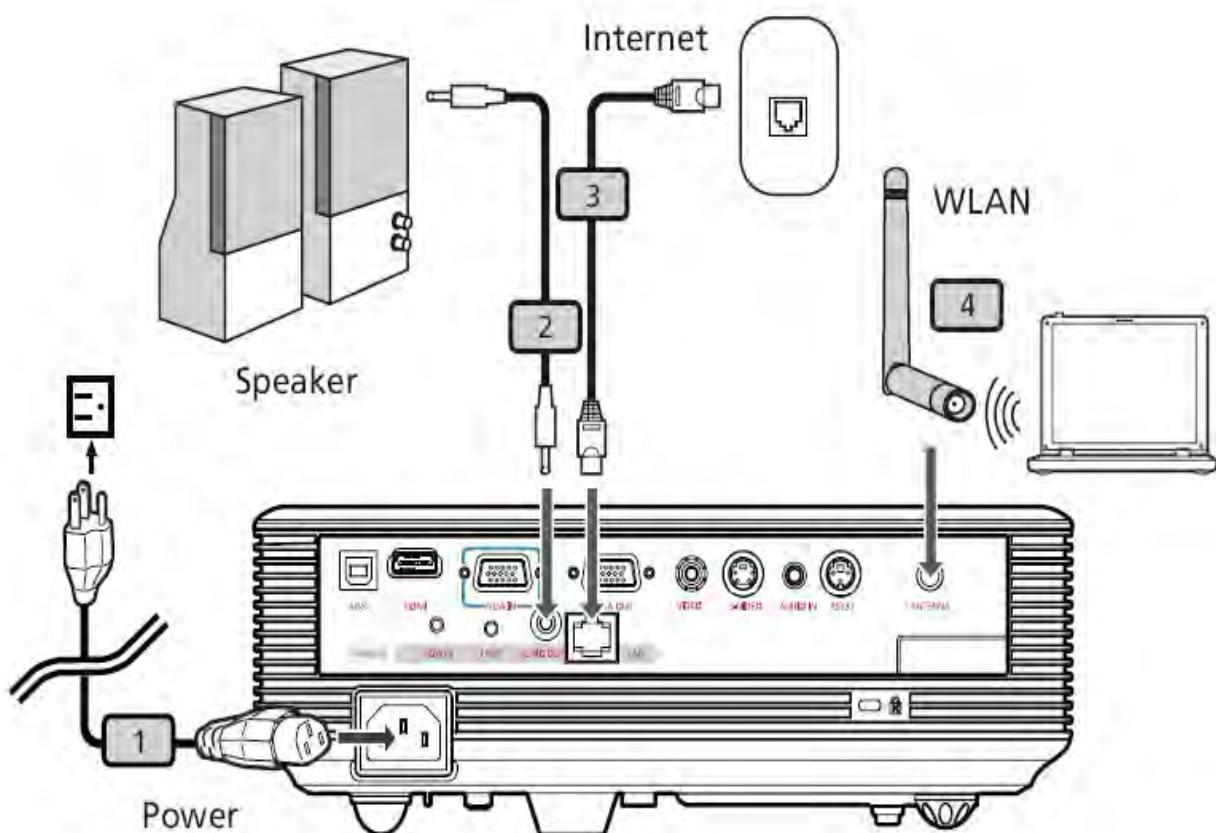


Item	Description	Item	Description
1	Power cord	6	S-Video cable
2	VGA cable	7	Audio cable jack/jack
3	Composite video cable	8	RS232 cable
4	USB cable	9	HDMI cable
5	VGA to component/HDTV adapter	10	3 RCA component cable



*Note: To ensure the projector works well with your computer, please make sure the timing of the display mode is compatible with the projector.*

## Connecting the Projector for Wireless Function

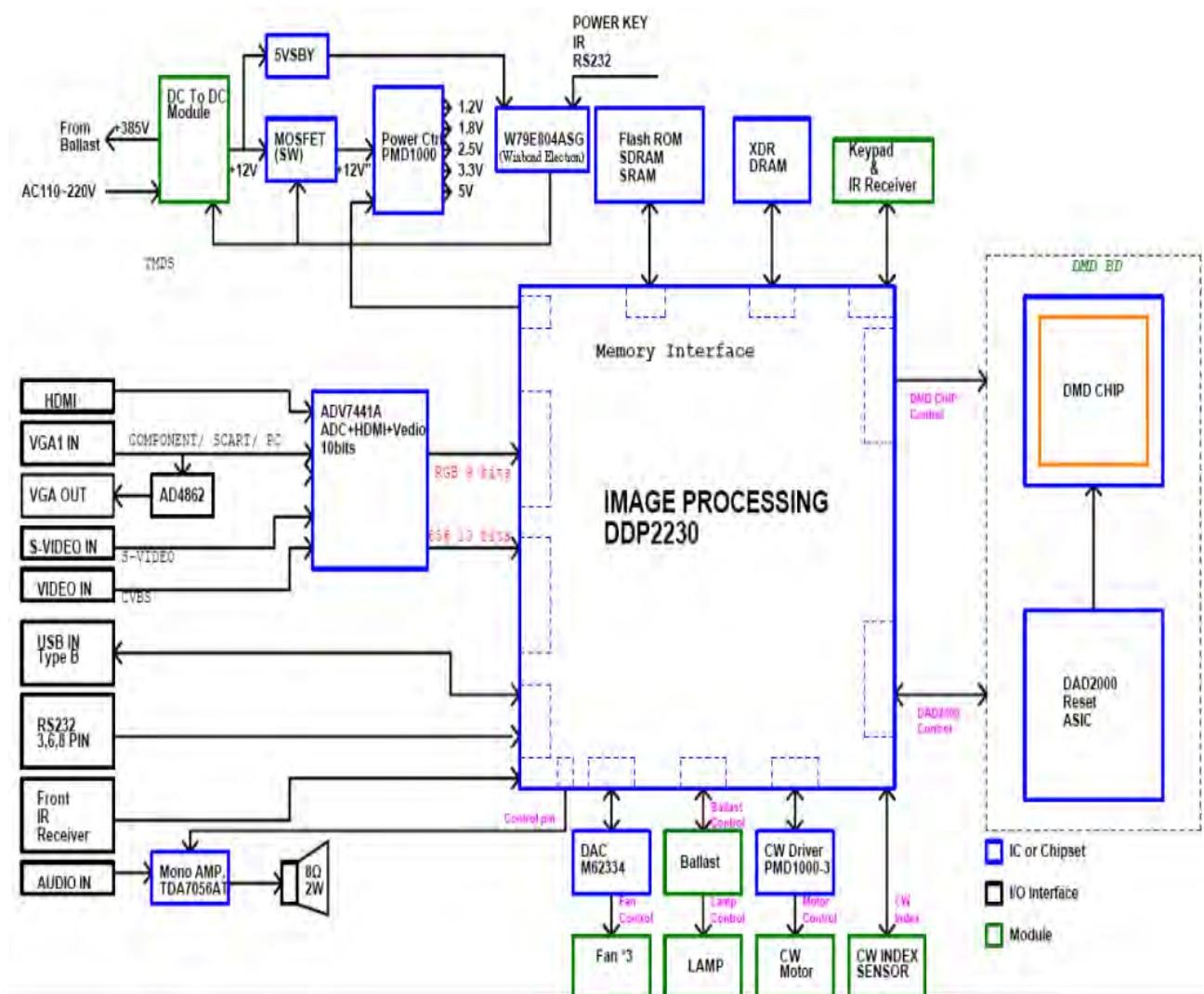


Item	Description
1	Power cord
2	Audio cable jack
3	Lan cable
4	Antenna

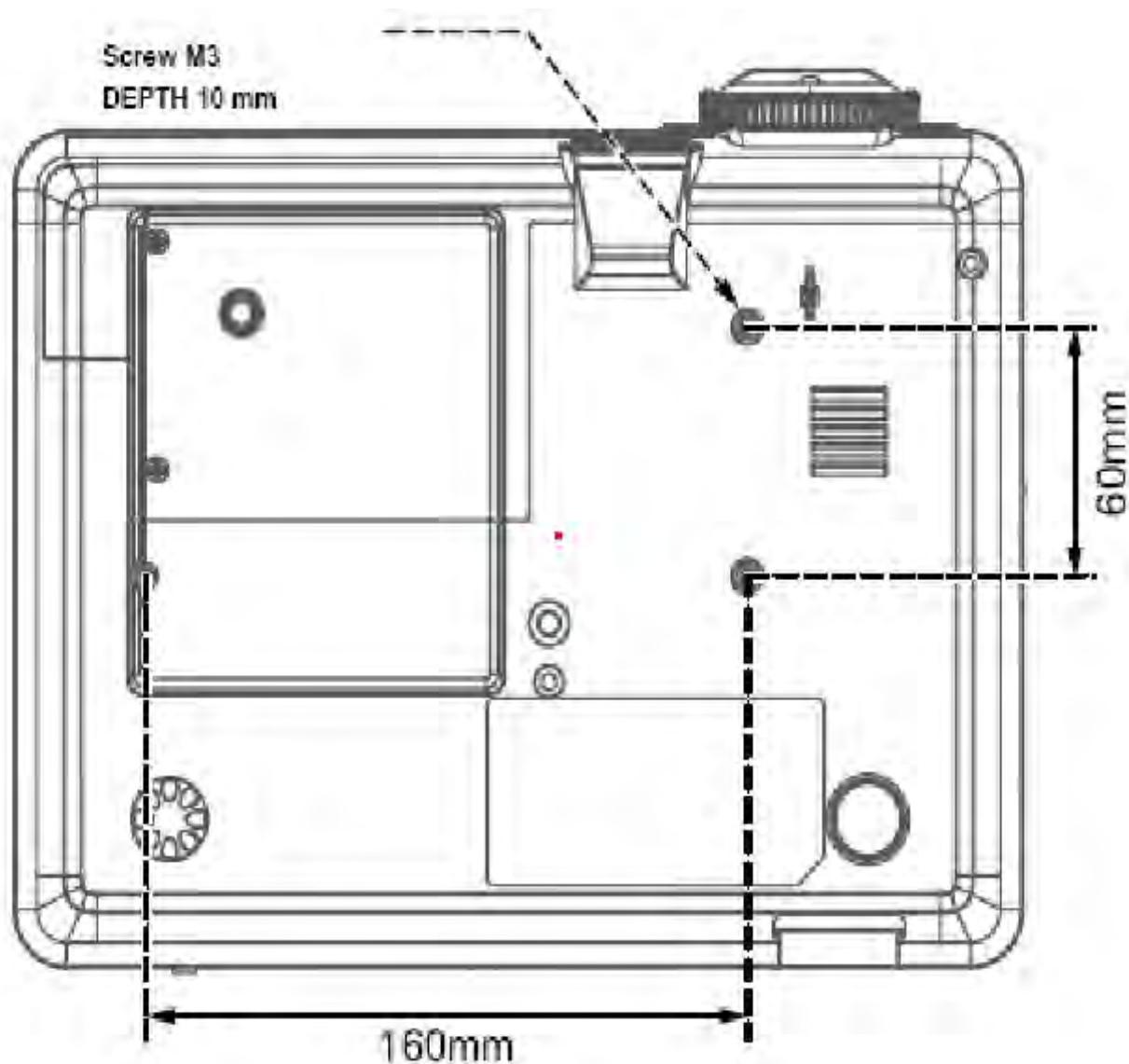


Note: For P1266i only

## System Block Diagram



## Bottom Cover Dimension



# Disassembly & Assembly Process

## 2-1 Equipment Needed & Product Overview

1. Screw Bit (+) :107
2. Hex Sleeves 5mm
3. Hex Sleeves 8mm
4. Tweezers
5. Long Nose Nipper, Angle Cutting Nipper
6. Sider Cutter Pliers
7. Projector

\* Before you start: This process is protective level II. Operators should wear electrostatic chains.

\* Note: - If you need to replace the main board, you have to get into service mode and record the lamp usage hour. please refer to section 2-22.

- The disassembly and assembly process for P1166 / P1266 / P1266i / P1166P / P1266P is the same . Here we take P1266 as an example.



## 2-2 Disassemble Lamp Cover Module and Lamp Module

1. Unscrew 2 screws (as red circle) to disassemble Lamp Cover Module.
2. Unscrew 2 screws (as yellow circle) to disassemble Lamp Module.



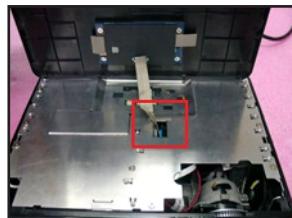
Lamp Module

## 2-3 Disassemble Top Cover Module

1. Unscrew 2 screws (as red circle) on Back Cover.
2. Turn the projector to backside. Unplug 1 connector (as red square)

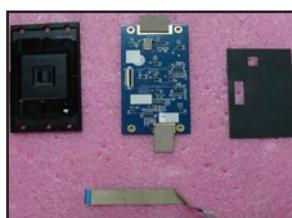
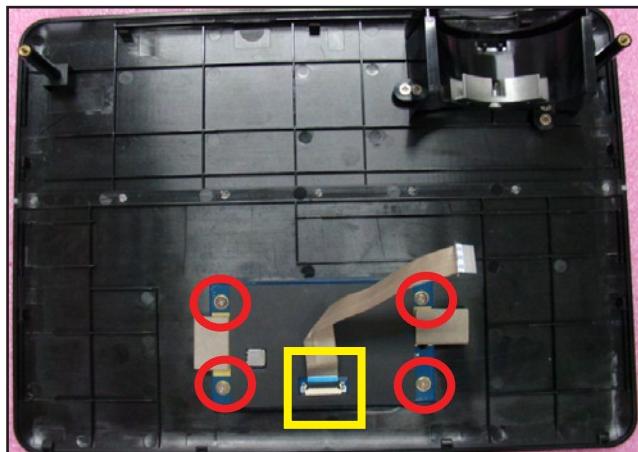
*Note: - Pull up the Top Cover slowly to protect the connector from damage.*

3. Disassembled Top Cover Module.



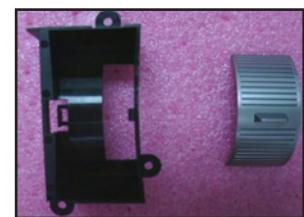
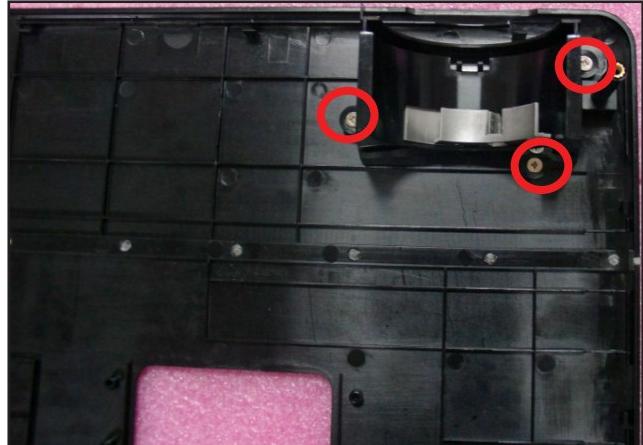
## 2-4 Disassemble Keypad Module

1. Unscrew 4 screws (as red circle).
2. Unplug 1 connector (as yellow square).
3. Disassemble all components of the Keypad Module.



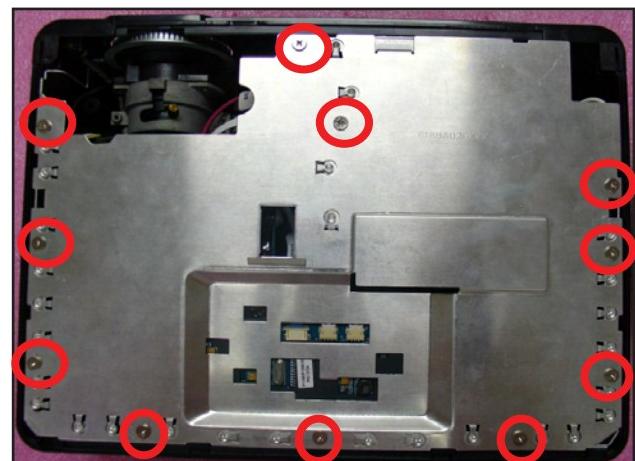
## 2-5 Disassemble Zoom Ring

1. Unscrew 3 screws (as red circle).
2. Use a tweezer to remove 2 tenons (as yellow circle) and then take off Zoom Ring.



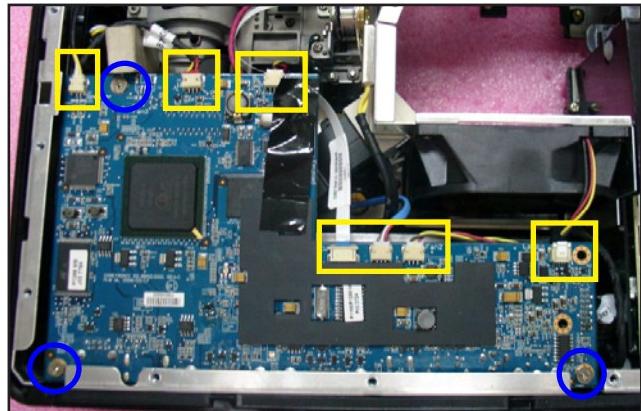
## 2-6 Disassemble Top Shielding

1. Unscrew 11 screws (as red circle).
2. Disassemble Top Shielding.



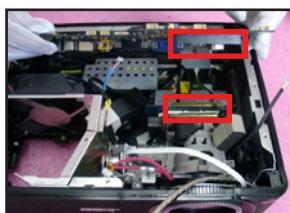
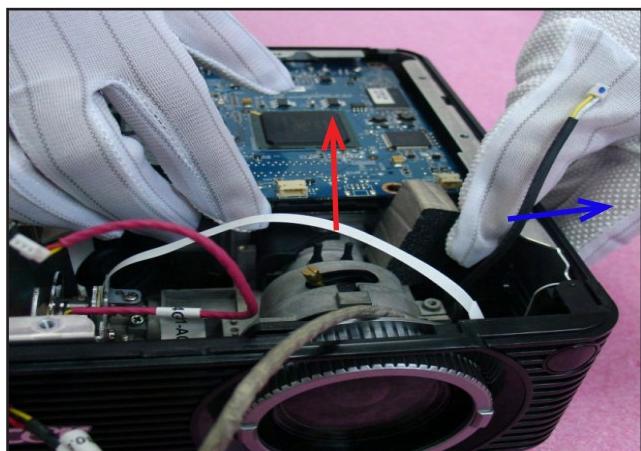
## 2-7 Disassemble Main Board Module

1. Unscrew 4 hex screws (as red circle).
2. Unscrew 3 screws (as blue circle).
3. Unplug 7 connectors (as yellow square).



4. Press Bottom Support shielding as blue arrow directs, push Main Board Module as red arrow directs.

*Note: - When pulling up the Main Board, please handle it carefully to avoid damaging the connector that connects the DMD Board (as red square).*

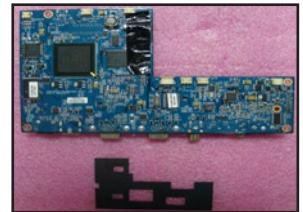
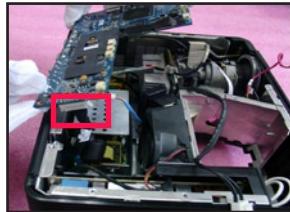


5. Unplug 1 connector (as red square).

*Note: The connector is under Main Board.*

6. Disassemble Main Board Module.

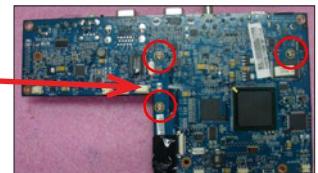
7. Tear Mylar off the Main Board.



## 2-8 Disassemble Wireless Module (only for P1266i)

1. Turn back the Main Board.

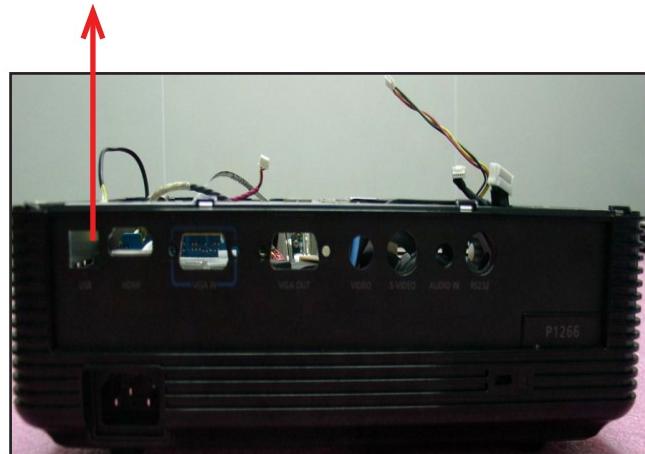
2. Unscrew 3 screws (as red circle) to disassemble Wireless Module.



Wireless Module

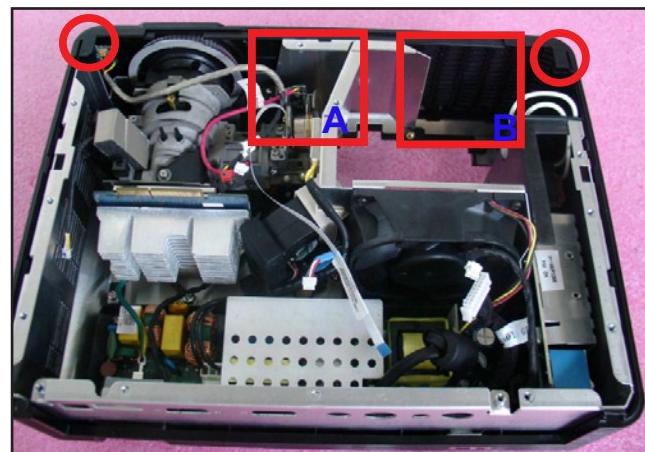
## 2-9 Disassemble Back Cover

1. Pull up Back Cover in the direction of the red arrow.



## 2-10 Disassemble Front Cover Module

1. Press 5 tenons (as red circle) to disassemble Front Cover.

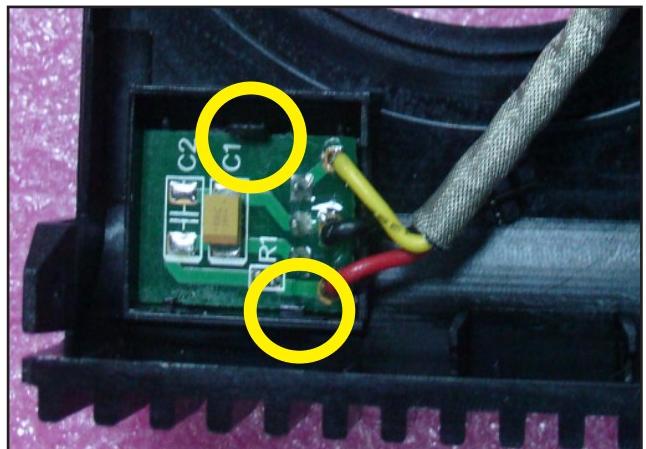


A



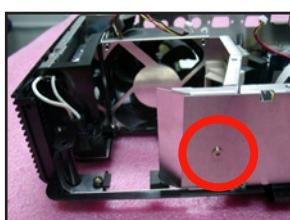
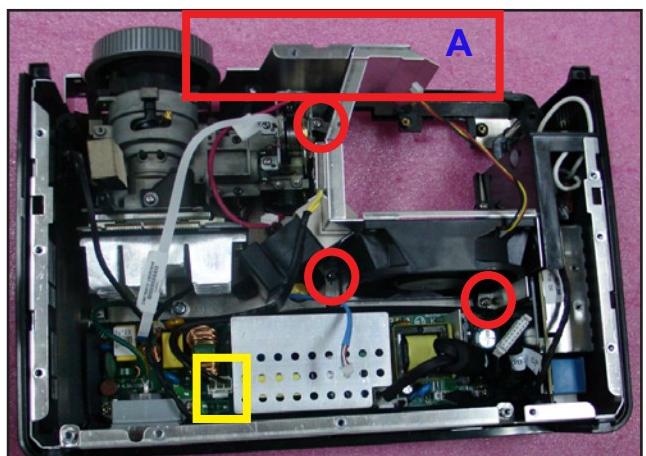
B

2. Press 2 tenons (as yellow circle) to disassemble IR sensor.



## 2-11 Disassemble Fan Module

1. Unscrew 4 screws (as red circle) to disassemble Fan Module.
2. Unplug 1 connector (as yellow square) to disassemble Fan.

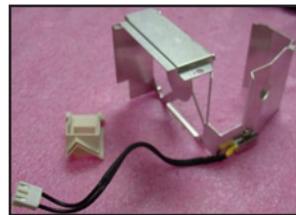
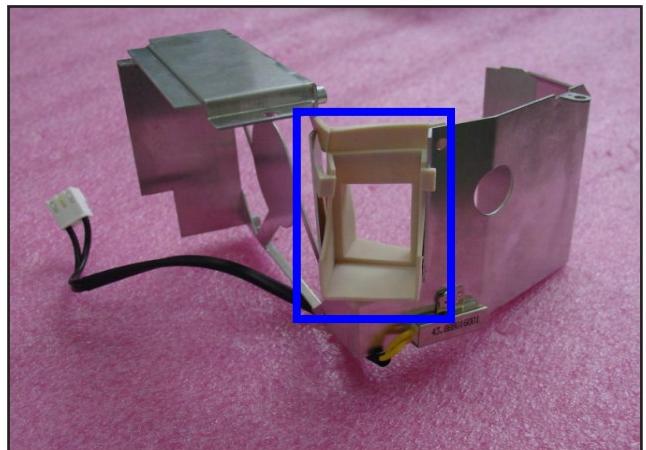


A

3. Unscrew 4 screws (as yellow circle) to disassemble Fan&Bracket.



4. Take off Lamp Blower Rubber (as blue square).



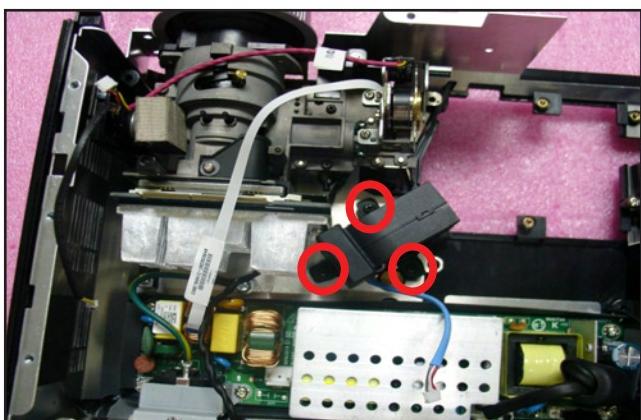
5. Unscrew 1 screw (as blue circle) to disassemble Thermal Switch.



Thermal Switch

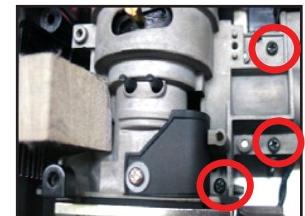
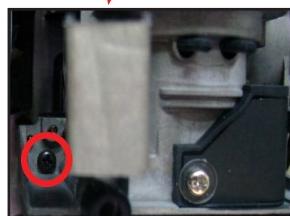
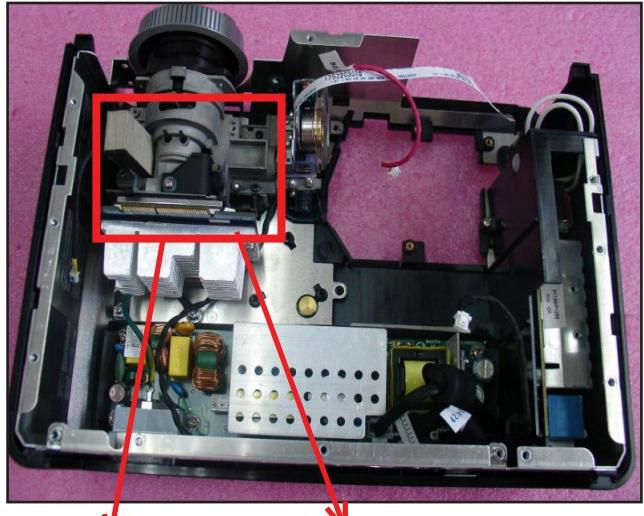
## 2-12 Disassemble Blower Module

1. Unscrew 3 screws (as red circle) to disassemble Blower Module.
2. Disassemble Blower and Blower Bracket.

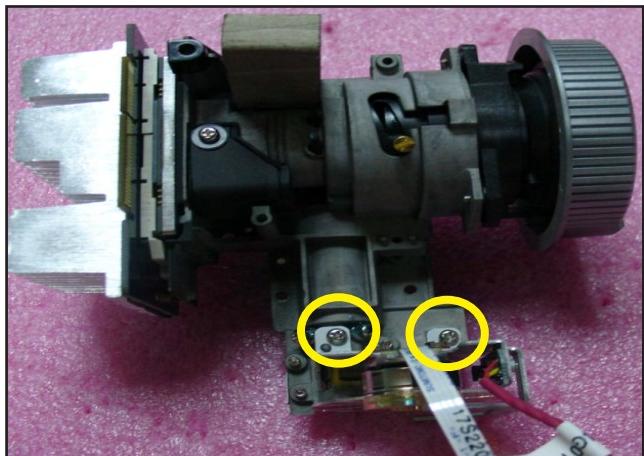


## 2-13 Disassemble Engine Module, Color Wheel Module and Rod Module

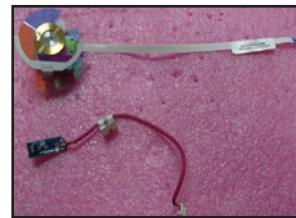
1. Unscrew 4 screws (as red circle) to disassemble Engine Module.



2. Unscrew 2 screws (as yellow circle) to disassemble Color Wheel Module.

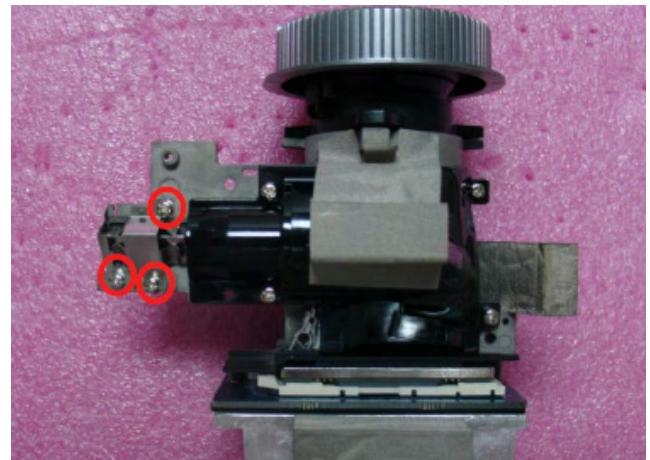


3. Unscrew 1 screw (as green circle) to disassemble Photo Sensor from Color Wheel Module.



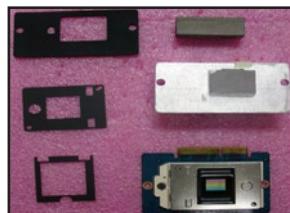
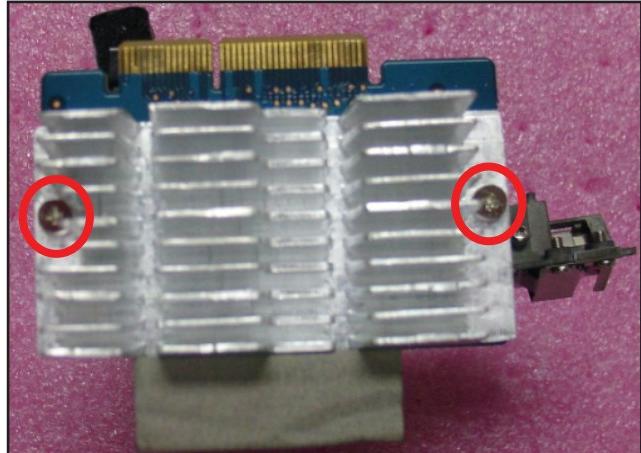
4. Unscrew 3 screws (as red circle).
5. Disassemble ROD Fix Plate and ROD Module.
6. Disassemble Focus Ring.

Note: - *Pay attention to the three tenons when disassembling focus ring.*

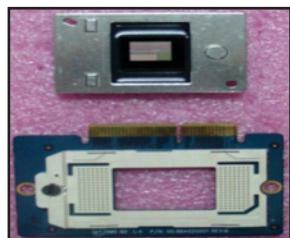
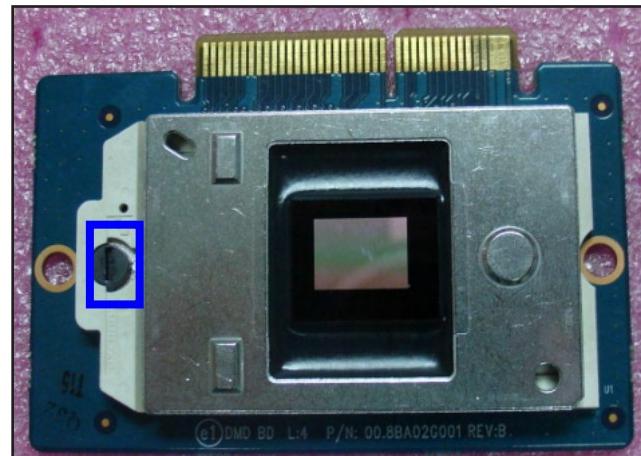


## 2-14 Disassemble DMD Board and DMD Chip Module

1. Unscrew 2 hex screws (as red circle).
2. Disassemble DMD Board and DMD Chip Module.



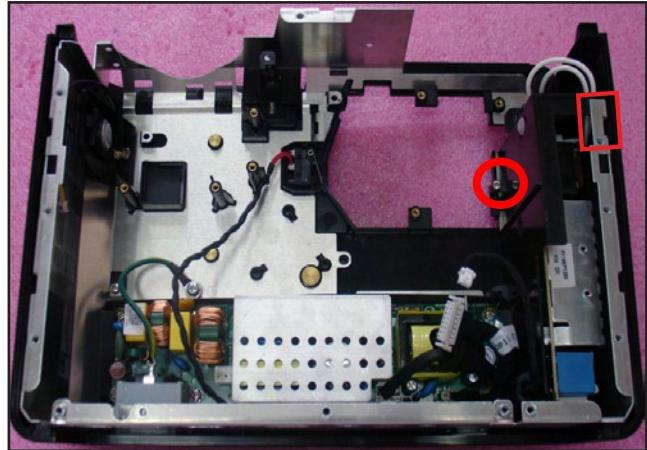
3. Rotate the switch(as blue square) and then take off DMD Chip.



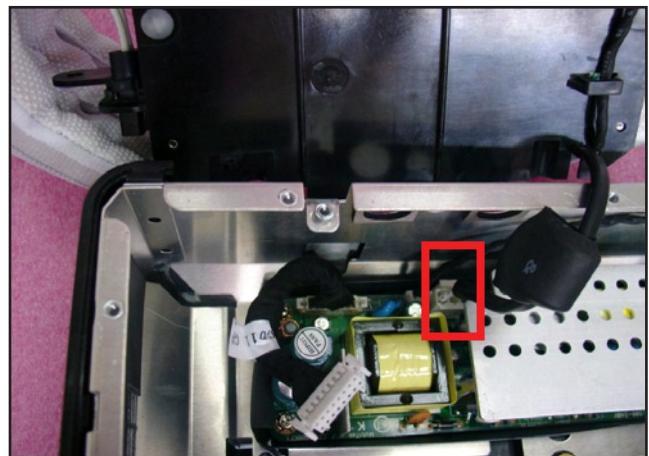
## 2-15 Disassemble Lamp Driver Module

1. Unscrew 1 screw (as red circle) to disassemble Lamp Driver Module.

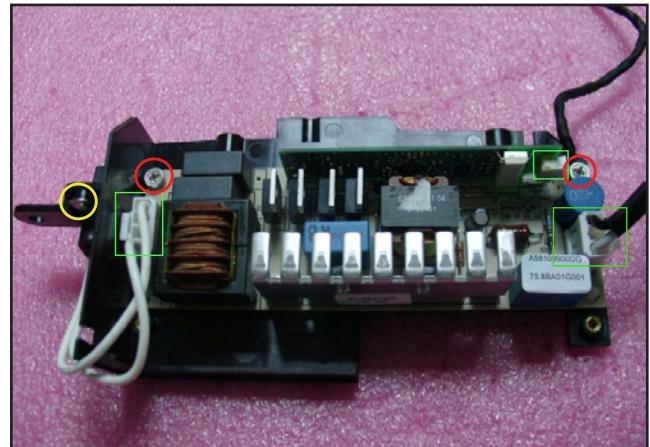
*Note: - Pull up lamp driver module from the bottom support shielding (as red square).*



2. Pull up 1 connector (as red square) to disassemble Lamp Driver Module.

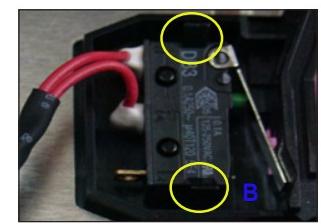
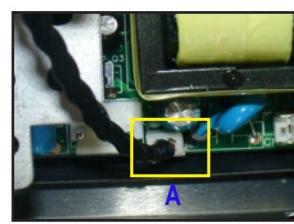
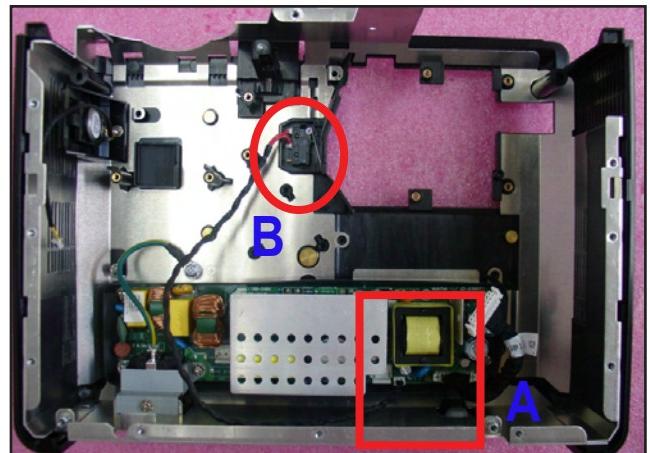


3. Unscrew 2 screws(as red circle).
4. Unscrew 1 screw(as yellow circle).
5. Unplug 3 connectors (as green square).
5. Disassemble Lamp Driver from Lamp  
Driver Support Shielding.
6. Take off lamp cables.



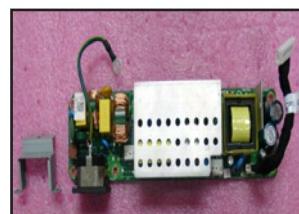
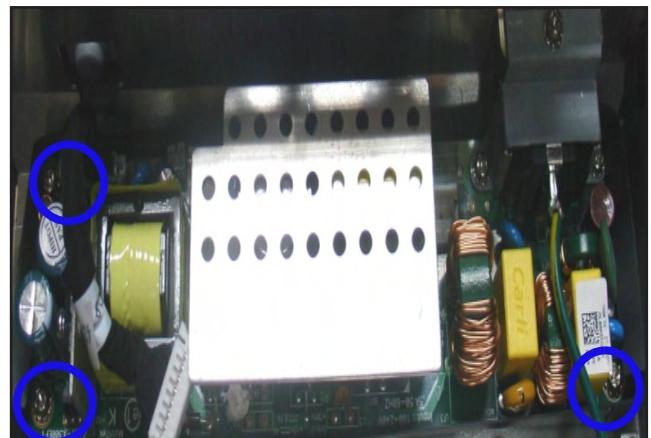
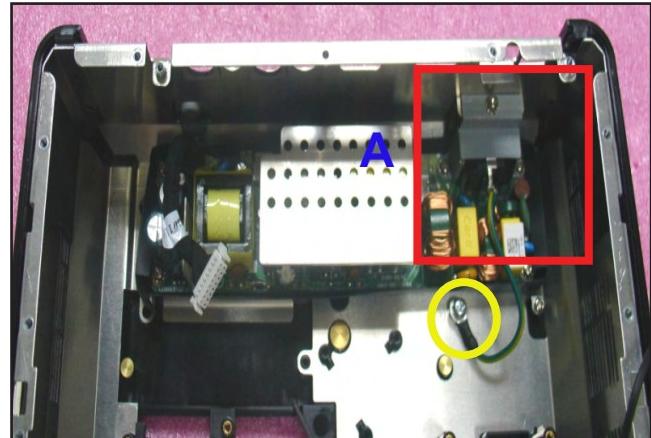
## 2-16 Disassemble Interrupt Switch Module

1. Unplug 1 connector (as yellow square) from LVPS.
2. Remove 2 tenons (as yellow circle) to disassemble Interrupt Switch Module.



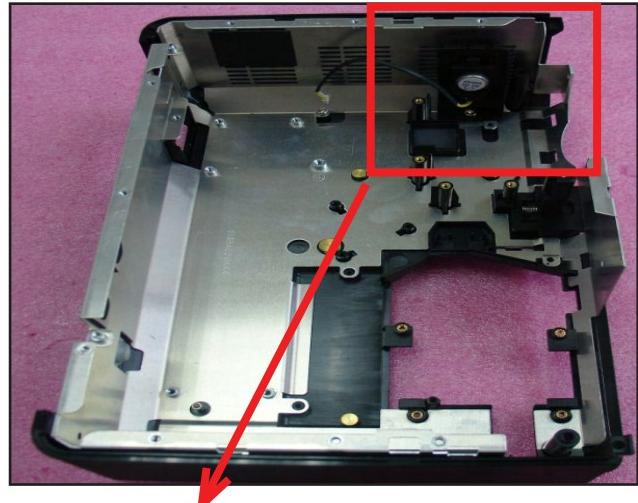
## 2-17 Disassemble LVPS Module

1. Unscrew 3 screws (as red circle) to take off AC Inlet Bracket.
2. Unscrew 1 ground screw (as yellow circle).
3. Unscrew 3 screws (as blue circle) to disassemble LVPS Bracket & Mylar.



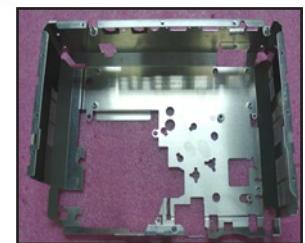
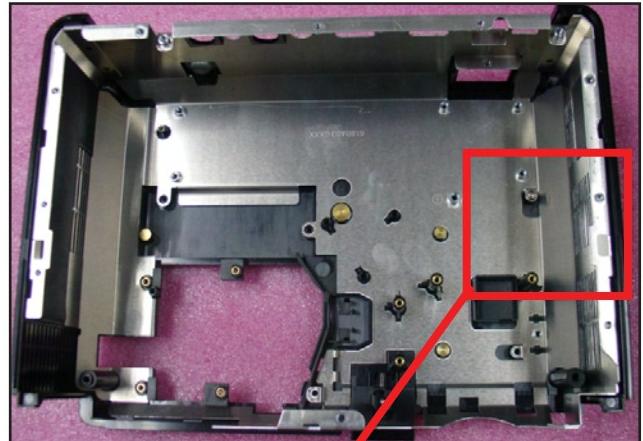
## 2-18 Disassemble Speaker Module

1. Unscrew 1 screw (as red circle) to disassemble speaker module.
2. Press 2 tenons (as yellow circle) to disassemble Speaker and Speaker Holder.



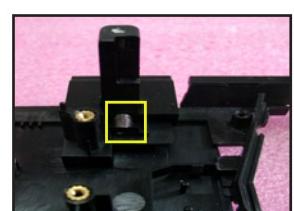
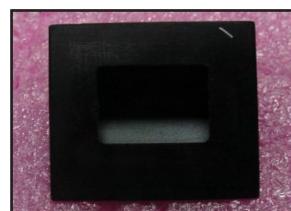
## 2-19 Disassemble Bottom Support Module

1. Unscrew 1 screw (as red circle) to disassemble Bottom Support Module.

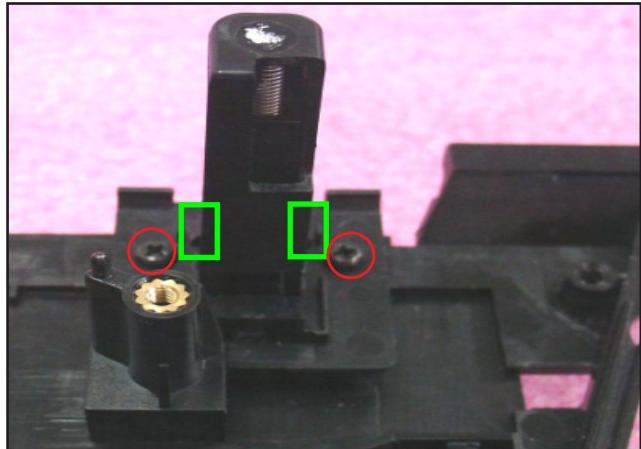


## 2-20 Disassemble Elevator Module

1. Disassemble the Rubber (as red square).
2. Disassemble 1 Spring (as yellow square).

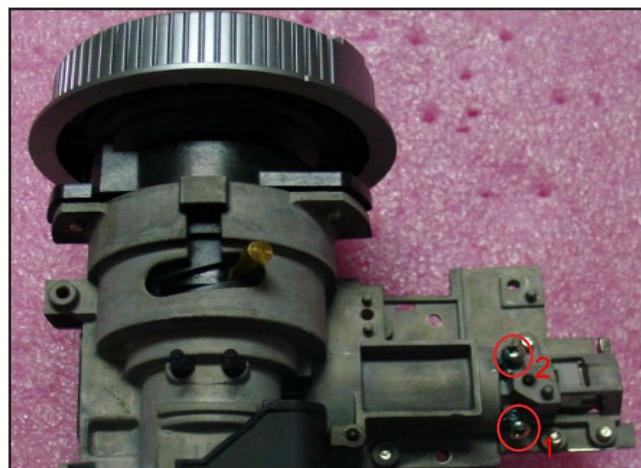


3. Press 2 tenons (as green square) to disassemble Elevator Holder.
4. Unscrew 2 screws (as red circle), then press 1 tenon (as blue square) to disassemble Elevator Foot.



## 2-21 Rod Adjustment

1. Environment adjustment
  - The distance between the engine and the screen is 2.37M
  - This process should be done at a dark environment. (under 5 Lux)
2. Procedure adjustment
  - Change the screen to "white screen."
  - Adjust the screws by using the rod on the engine module to readjust the image.



(“screw 1“ should be adjusted first, and then “screw 2“. Adjust until the yellowish or bluish parts disappeared.)

### 3. Abnormal image inspection

- It should not have any abnormal color at the rim of the image by estimating through the eyes.

*Note:* - To avoid over adjusting the rod.

- After the operation, please use the glue to fix the screws.

## 2-22 Re-write Lamp Usage Hour

### 1. Get into service mode

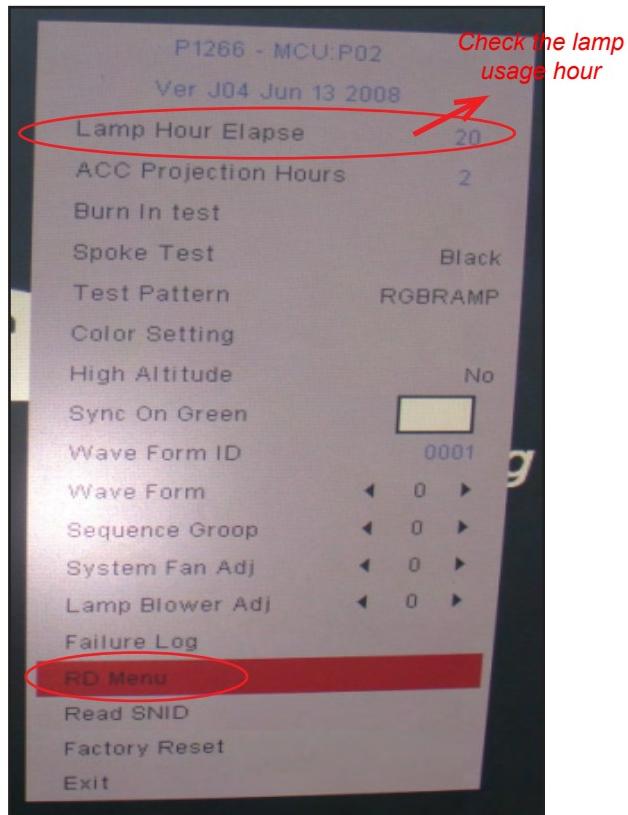
- Press (power→left→left→menu) to get into service mode

### 2. Select “RD Menu”.

### 3. The “Lamp Life Calculate Hours” = “Full Mode Hours Test” + “Eco Mode Hours Test”.

Select “Full Mode Hours Test”, then use left or right key to re-write the lamp hour back to previous lamp usage hour.

The way of re-writing “Eco Mode Hours Test“ is the same as “Full Mode Hours



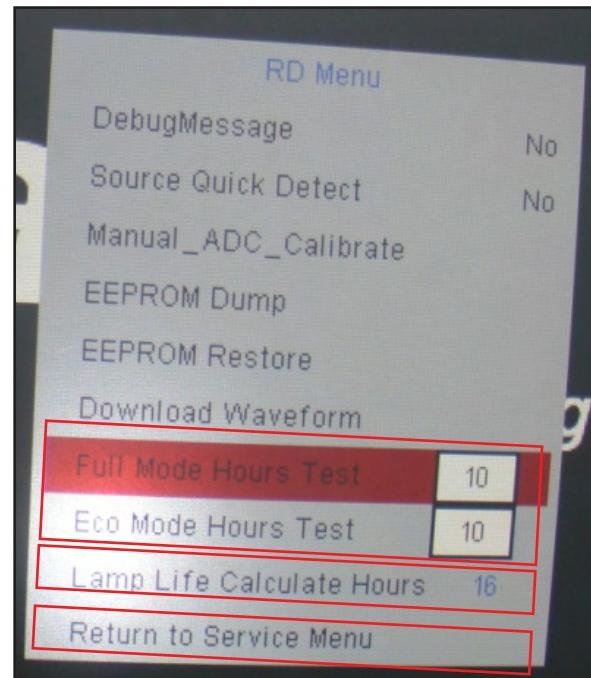
Test".

4. Choose "Return to Service Menu".

5. Choose "Exit".

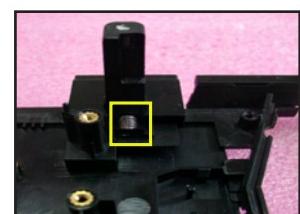
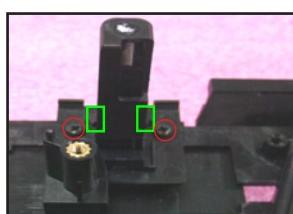
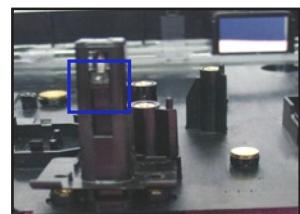
*Note: left key = decrease lamp hour*

*right key =increase lamp hour*

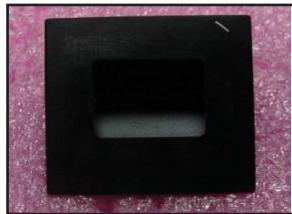


## 2-23 Assemble Elevator Module

1. Fasten 1 tenon (as blue square) to assemble ElevatorRoot. Then screw 2 screws (as red circle).
2. Fasten 2 tenons (as green square) to assemble Elevator Holder.
3. Assemble 1 Spring (as yellow square).

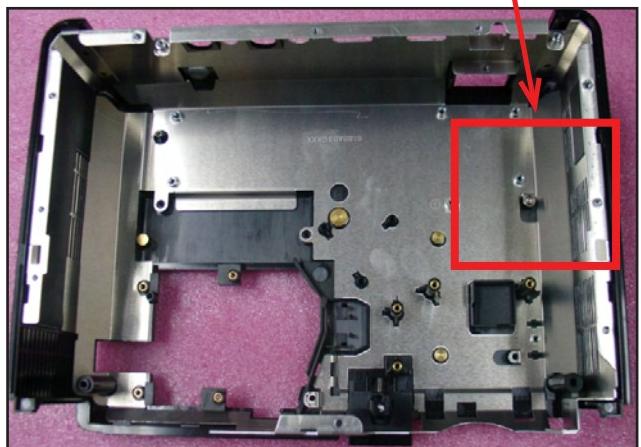


4. Assemble the Rubber (as red square).



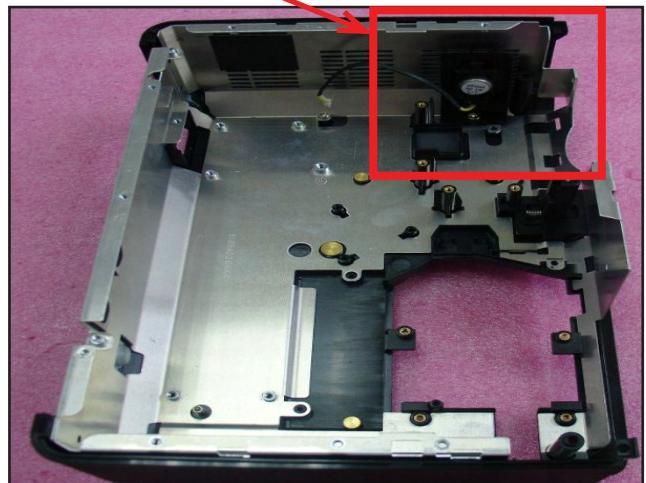
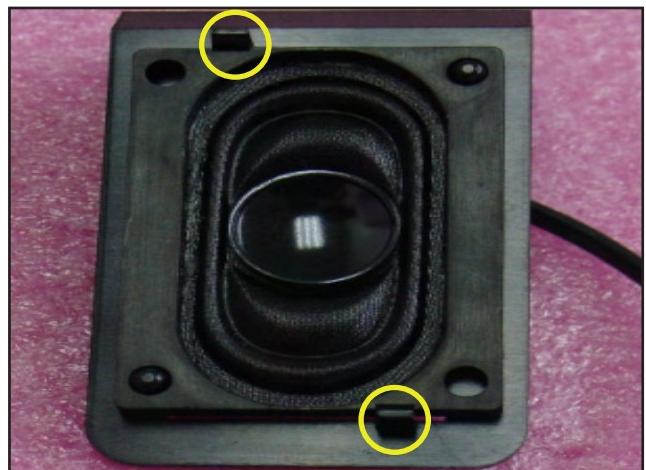
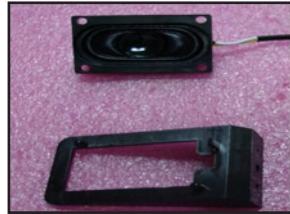
## 2-24 Assemble Bottom Support Module

1. Screw 1 screw (as red circle) to assemble Bottom Support Module.



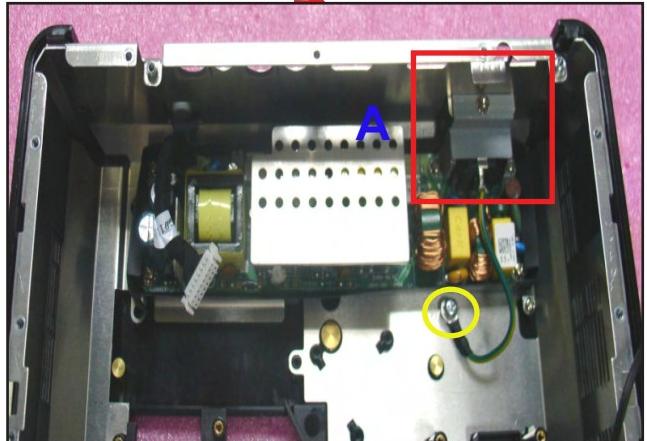
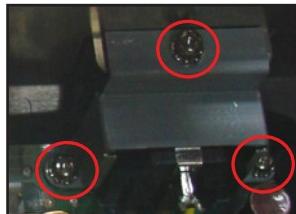
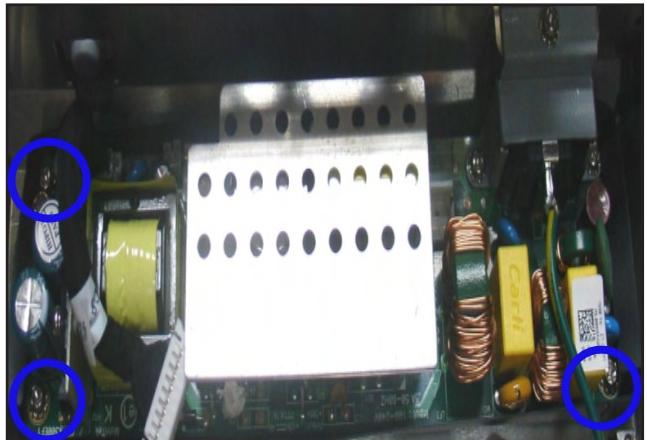
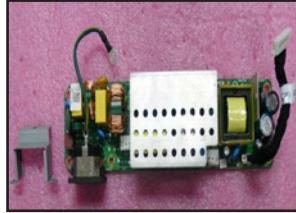
## 2-25 Assemble Speaker Module

1. Fasten 2 tenons (as yellow circle) to assemble Speaker and Speaker Holder.
2. Screw 1 screw (as red circle) to assemble Speaker Module.



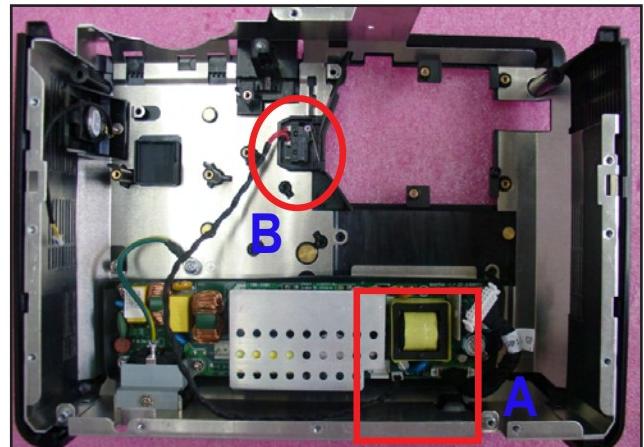
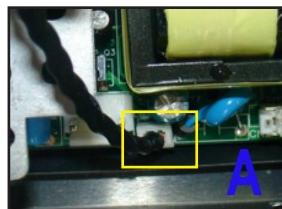
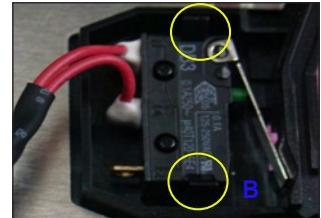
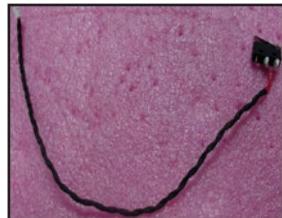
## 2-26 Assemble LVPS Module

1. Screw 3 screws (as blue circle) to assemble LVPS Bracket & Mylar.
2. Screw 1 ground screw (as yellow circle).
3. Screw 3 screws (as red circle) to fix AC Inlet Bracket.



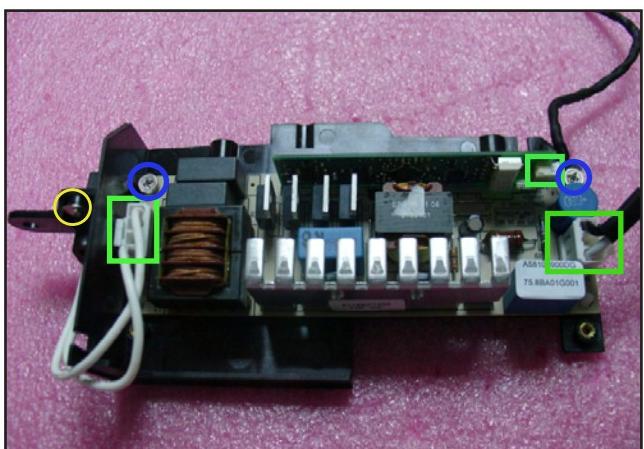
## 2-27 Assemble Interrupt Switch Module

1. Fasten 2 tenons (as yellow circle) to assemble Interrupt Switch Module.
2. Plug 1 connector (as yellow square) into LVPS.



## 2-28 Assemble Lamp Driver Module

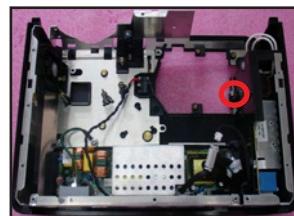
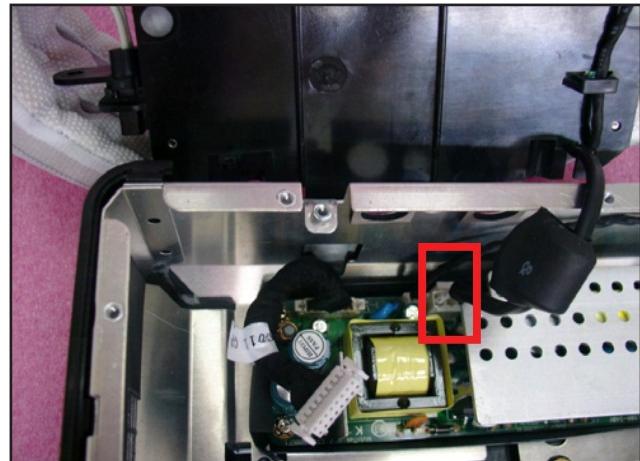
1. Assemble Lamp Driver with Lamp Driver Support Shielding.
2. Connect Lamp Cables with Lamp Driver (as green square).
3. Screw 1 screw (as yellow circle) to assemble Lamp Cable.
4. Screw 2 screws (as blue circle).



5. Plug 1 connector (as red square) to assemble Lamp Driver Module.

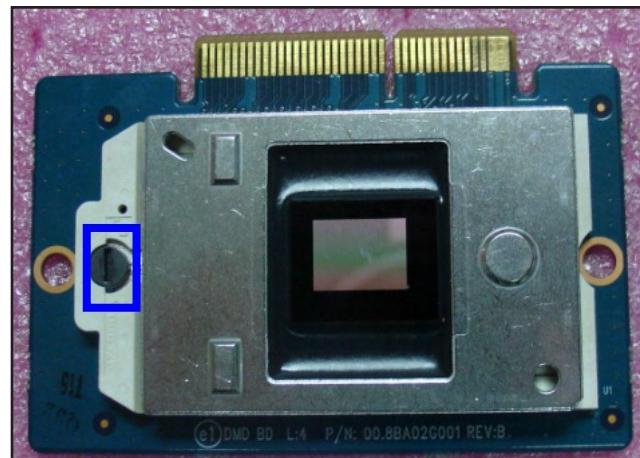
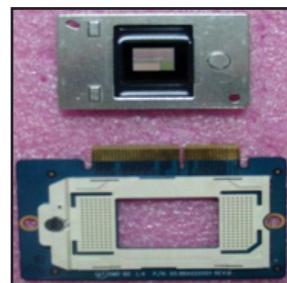
6. Screw 1 screw (as red circle) to assemble Lamp Driver Module.

*Note:* - Put lamp driver module below the bottom support shielding.



## 2-29 Assemble DMD Board and DMD Chip Module

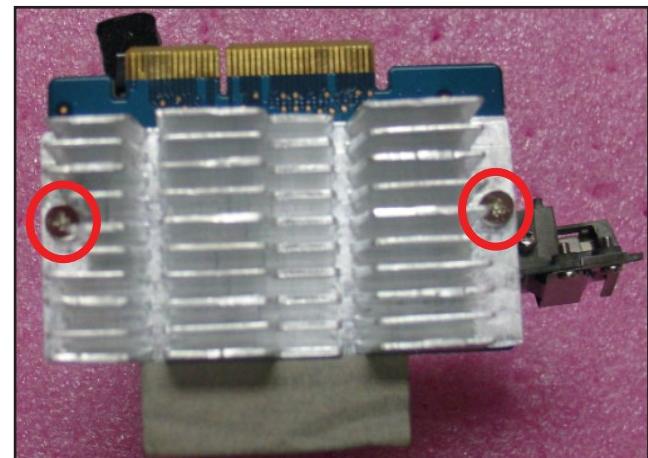
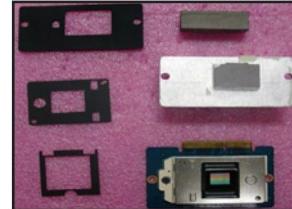
1. Rotate the switch (as blue square) to assemble DMD Chip.



2. Assemble DMD Board and DMD

Chip Module.

3. Screw 2 hex screws (as red circle).



## 2-30 AssembleEngine Module, Color Wheel Module and Rod Module

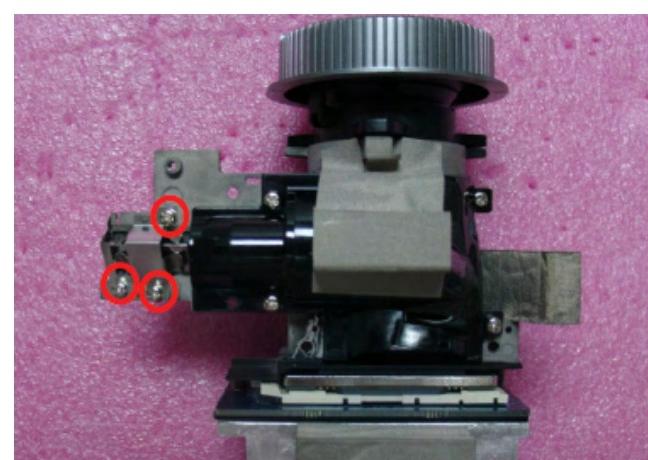


1. Assemble Focus Ring.

*Note:* - Pay attention to the three tenons  
when disassembling focus ring.

2. Screw 3 screws (as red circle)to  
assemble ROD fix plate and ROD  
Module.

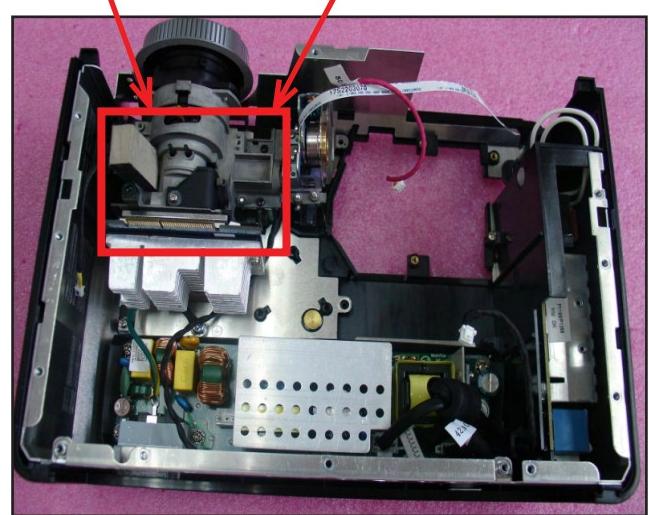
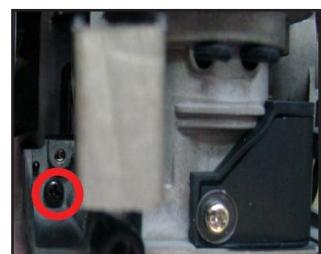
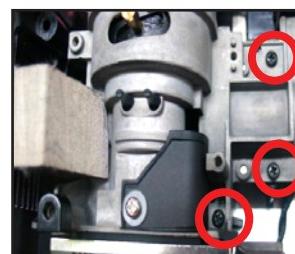
3. Screw 1 screw (as green circle) to  
assemble Photo Sensor with Color  
Wheel Module.



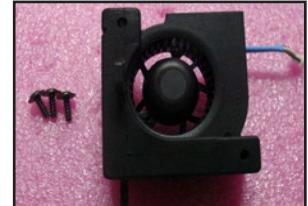
4. Screw 2 screws (as yellow circle) to assemble Color Wheel Module.



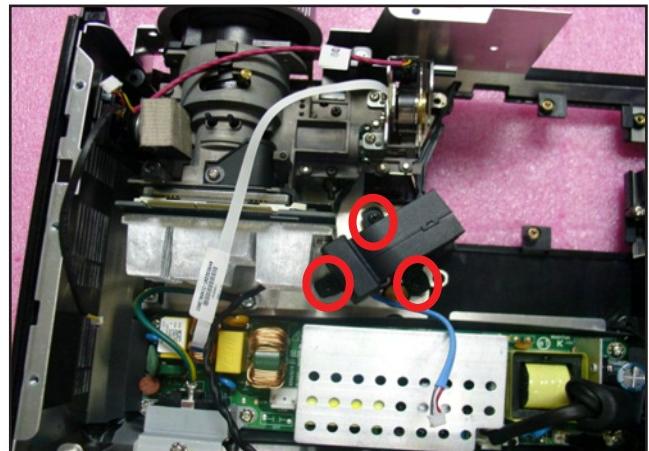
5. Screw 4 screws (as red circle) to assemble Engine Module.



## 2-31 Assemble Blower Module



1. Assemble Blower and Blower Bracket.
2. Screw 3 screws (as red circle) to assemble Blower Module.

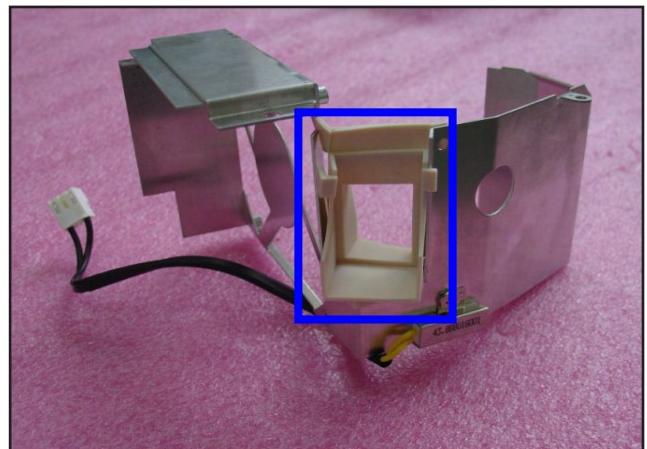


## 2-32 Assemble Fan Module

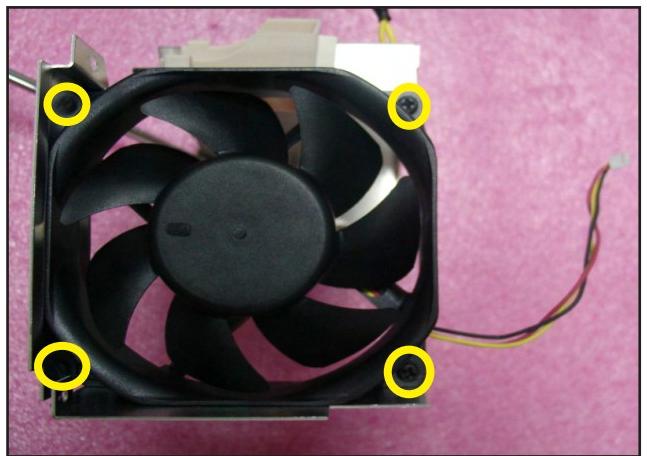
1. Screw 1 screw (as blue circle) to assemble Thermal Switch.



2. Assemble Lamp Blower Rubber (as blue square).

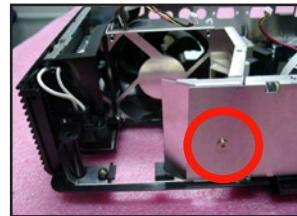


3. Screw 4 screws (as yellow circle) to assemble Fan&Bracket.

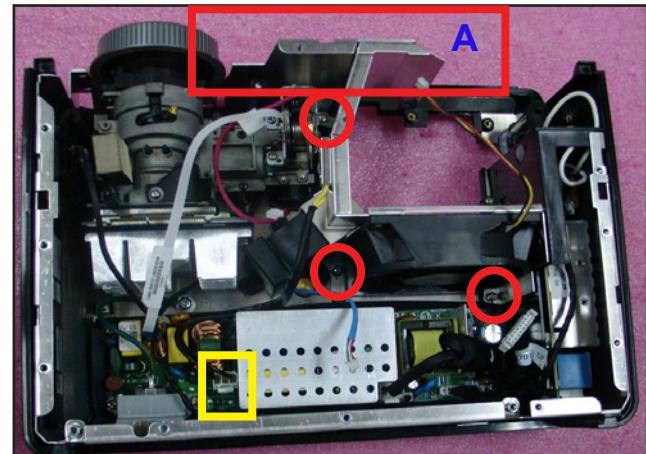


4. Plug 1 connector (as yellow square) to assemble Fan.

5. Screw 4 screws (as red circle) to assemble Fan Module.

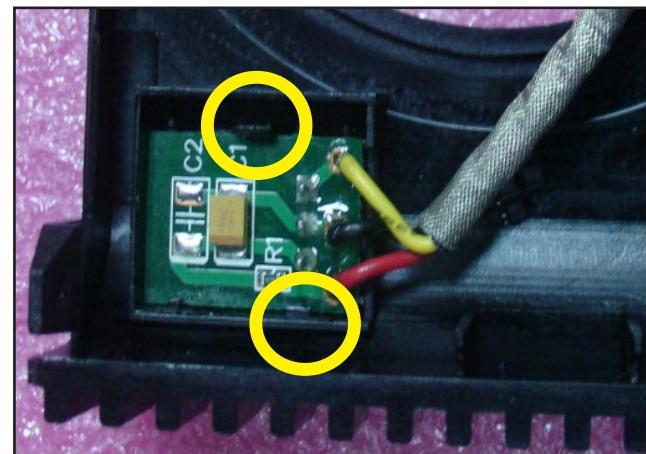


A

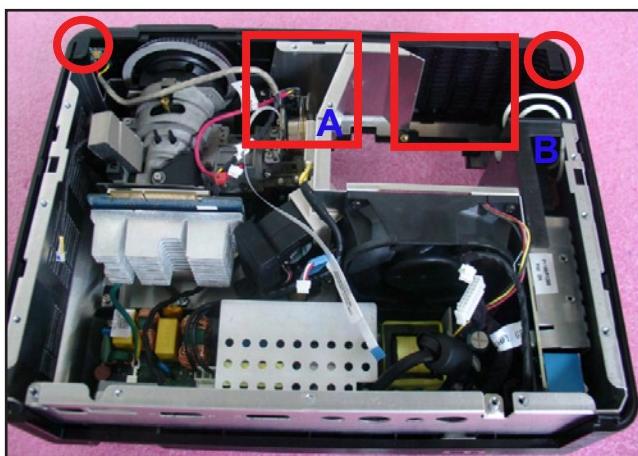
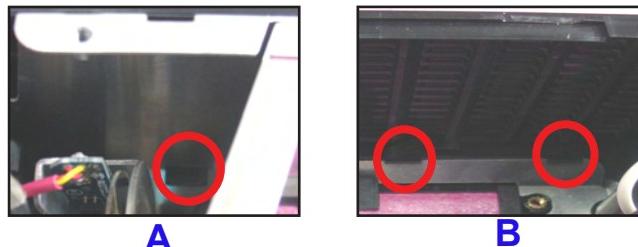


## 2-33 Assemble Front Cover Module

1. Fasten 2 tenons (as yellow circle) to assemble IR sensor.

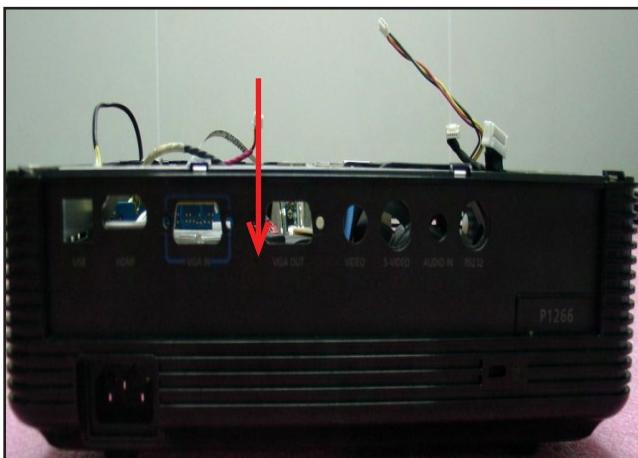


2. Fasten 5 tenons (as red circle) to assemble Front Cover.



## 2-34 Assemble Back Cover

1. Assemble Back Cover in the direction of the red arrow.



## 2-35 Assemble Wireless Module (only for P1266i)

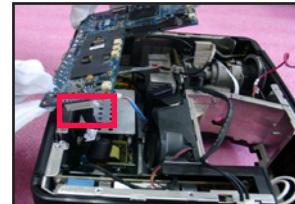
1. Screw 3 screws (as red circle) to disassemble Wireless Module.
2. Turn back the Main Board Module.



## 2-36 Assemble Main Board Module

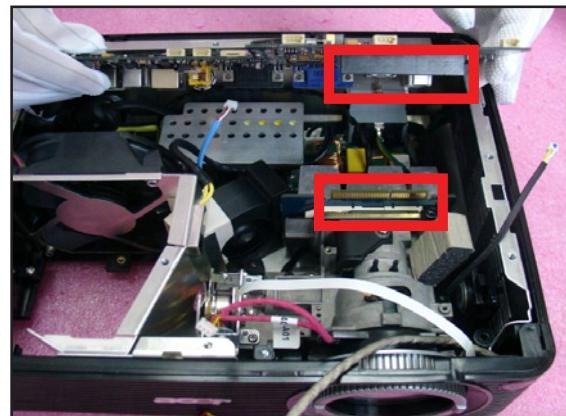
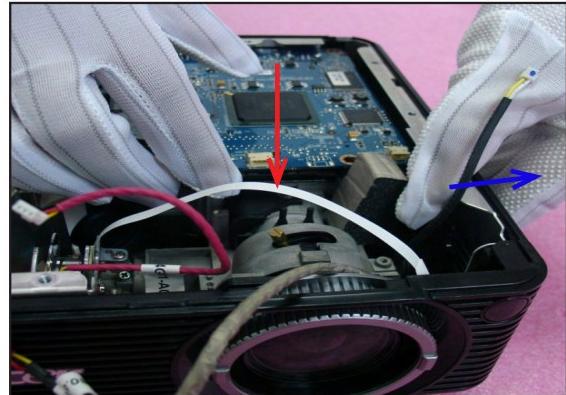
2. Assemble mylar on the Main Board.
3. Connect 1 connector (as red square).

*Note: The connector is under Main Board.*

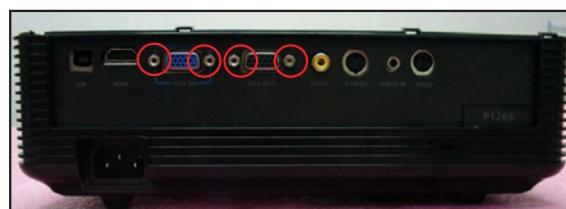
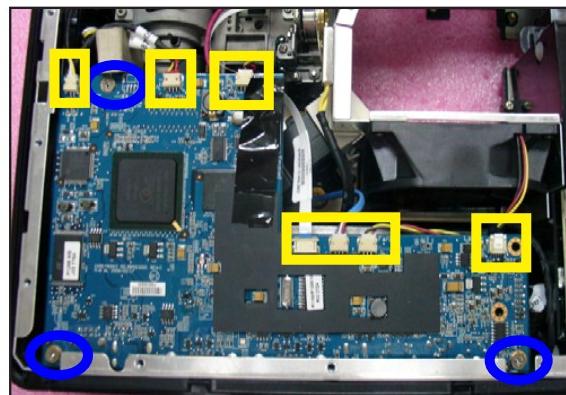


4. Press bottom support shielding as blue arrow directs, push Main Board Module as red arrow directs.

*Note: The connector on the Main Board should be connected to the DMD Board (as red square) when assembling Main Board.*

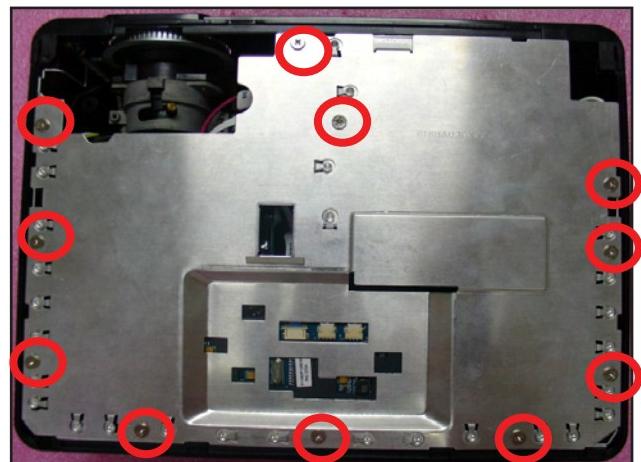
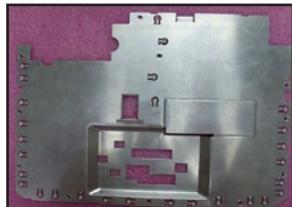


5. Plug 7 connecors (as yellow square).  
6. Screw 3 screws (as blue circle).  
7. Screw 4 hex screws (as red circle).



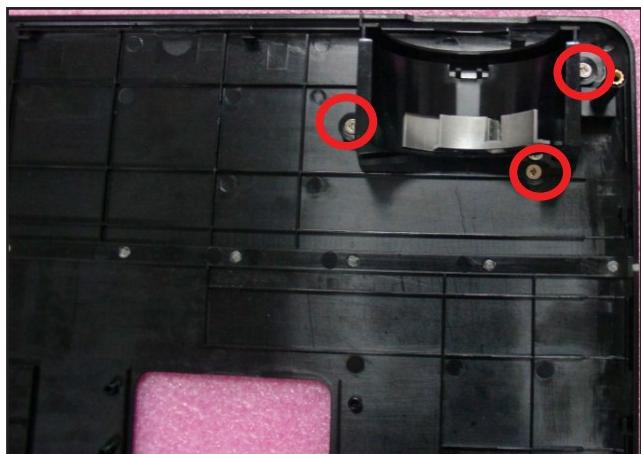
## 2-37 Assemble Top Shielding

1. Assemble Top Shielding.
2. Screw 11 screws (as red circle) on Top Shielding.



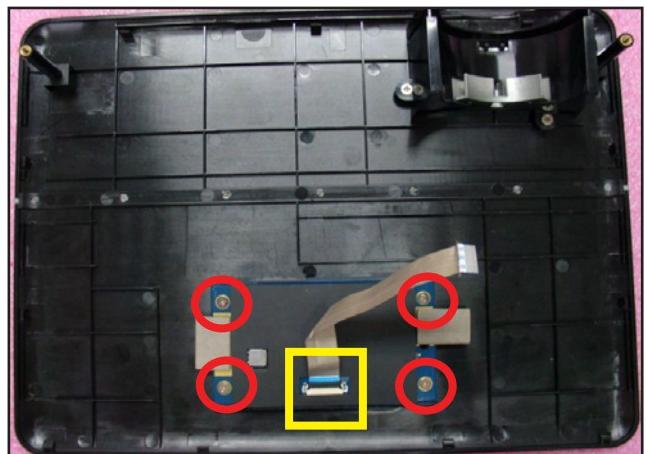
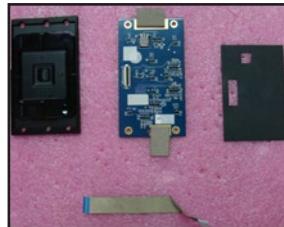
## 2-38 Assemble Zoom Ring

1. Fasten 2 tenons (as yellow circle) to assemble Zoom Ring.
2. Screw 3 screws (as red circle).



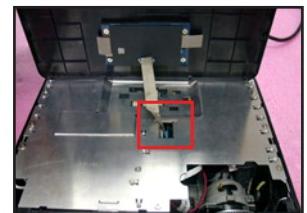
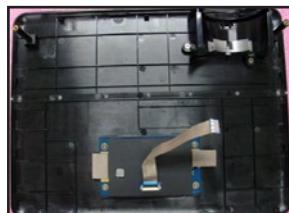
## 2-39 Assemble Keypad Module

1. Assemble Keypad Board,Keypad Board Bracket and Mylar.
2. Plug 1 FPC Cable (as yellow square).
3. Screw 4 screws (as red circle).



## 2-40 Assemble Top Cover Module

1. Assemble the Top Cover Module.
2. Unplug 1 connector (as red square).
3. Turn the projector to backside, screw 2 screws (as red circle) on Back Cover.



## 2-41 Assemble Lamp Cover Module and Lamp Module



1. Screw 2 screws (as yellow circle) to assemble Lamp Module.



2. Screw 2 screws (as red circle) to assemble Lamp Cover Module.



# Troubleshooting

## 3-1 LED Lighting Message

NO.	Message	Lamp LED	Temp LED	Power LED	
		Red	Red	Red	Blue
1	Standby (power cord plugged in)	--	--	V	--
3	Power button ON	--	--	--	V
4	Lamp retry	--	--	--	Quick flashing
5	Turning off (cooling state)	--	--	Quick flashing	--
6	Turning off (cooling completed)	--	--	V	--
7	Error (thermal failure)	--	V	--	--
8	Error (fan lock failure)	--	Quick flashing	--	V
9	Error (lamp breakdown)	V	--	--	V
10	Error (color Wheel fail)	Quick flashing	--	--	V

Note: Steady Light: "V", No Light: "--"

## 3-2 Beep Sound

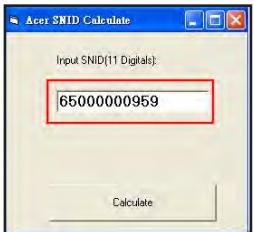
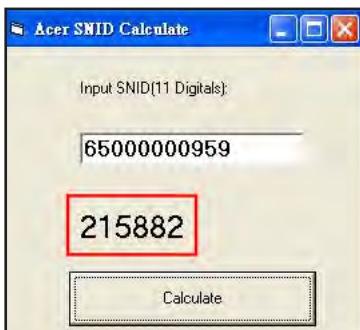
Power on (as soon as power button pressed)	So (0.3s)
Power on (lamp lighting failed)	2 x {So(0.1s) – Off(0.1s)} per lighting failure 12s interval for each trial lighting. Max 4 times of trial
Power on (lens cap was not opened, for the model with sliding lens cover only)	2 x {So(0.1s) – Off(0.1s)} periodically per 3 seconds, Totally 5 cycles. Turn off projector after 5 cycles.
Close lens cap while projector is operating (for the model with sliding lens cover only)	2 x {So(0.1s) – Off(0.1s)} periodically per 3 seconds, Totally 5 cycles. Turn off projector after 5 cycles.
Power off (power button pressed twice)	So(0.3s)
Fan lock	So(0.1s) periodically per second
Overheat	2 x {So(0.1s) – Off(0.1s)} periodically per second
Lamp error	3 x {So(0.1s) – Off(0.1s)} periodically per second
Lamp Life reminding	3 x {Do(0.2s) – Off(0.8s) – So(0.2s) – Off(0.8s)} with reminding message
Presentation Timer (time is up)	3 x {Do(0.1s) – Off(0.9s)} - So(0.5s)

### 3-3 Main Procedure

No	Symptom	Procedure
1	No Power	<ul style="list-style-type: none"> <li>- Ensure the Power Cord and AC Power Outlet are securely connected</li> <li>- Check Lamp Cover and Interrupt Switch</li> <li>- Ensure all connectors are securely connected and aren't broken</li> <li>- Check Lamp driver</li> <li>- Check LVPS</li> <li>- Check Main Board</li> </ul>
2	Auto Shut Down	<ul style="list-style-type: none"> <li>- Check LED Status             <ul style="list-style-type: none"> <li>a. Temp LED Flashing Red                     <ul style="list-style-type: none"> <li>- Check Fan</li> <li>- Check Main Board</li> </ul> </li> <li>b. Temp LED Light Red                     <ul style="list-style-type: none"> <li>- Check Thermal Switch</li> <li>- Check Vents</li> <li>- Check Main Board</li> </ul> </li> <li>c. Lamp LED Flashing Red                     <ul style="list-style-type: none"> <li>- Check Color Wheel</li> <li>- Check Photo Sensor Board</li> <li>- Check Main Board</li> </ul> </li> <li>d. Lamp LED Light Red                     <ul style="list-style-type: none"> <li>- Check Lamp</li> <li>- Check Lamp Driver</li> <li>- Check Main Board</li> </ul> </li> </ul> </li> </ul>
3	No Light On	<ul style="list-style-type: none"> <li>- Ensure all connectors are securely connected and aren't broken</li> <li>- Check Lamp Module</li> <li>- Check Lamp driver</li> <li>- Check LVPS</li> <li>- Check Main Board</li> </ul>
4	No Image	<ul style="list-style-type: none"> <li>- Ensure the Signal Cable and Source work as well (If you connect multiple sources at the same time, use the "Source"button on the control panel to switch)</li> <li>- Ensure all connectors are securely connected and aren't broken</li> <li>- Check Main Board</li> <li>- Check DMD Board</li> <li>- Check DMD Chip</li> </ul>

No	Symptom	Procedure
5	Mechanical Noise	<ul style="list-style-type: none"> <li>- Check Color Wheel</li> <li>- Check Fan Module</li> </ul>
6	Line Bar / Line Defect	<ul style="list-style-type: none"> <li>- Sometimes it's because of the DMD Chip and the DMD Board did not assemble properly</li> <li>- Check DMD Board</li> <li>- Check DMD Chip</li> <li>- Check Main Board</li> </ul>
7	Image Flicker	<ul style="list-style-type: none"> <li>- Do "Reset" of the OSD Menu</li> <li>- Ensure the Signal Cable and Source work as well</li> <li>- Check Lamp Module</li> <li>- Check Color Wheel</li> <li>- Check DMD Board</li> <li>- Check Main Board</li> </ul>
8	Color Abnormal	<ul style="list-style-type: none"> <li>- Do "Reset" of the OSD Menu</li> <li>- Adjust Color Wheel Index</li> <li>- Check Main Board</li> <li>- Check Color Wheel</li> </ul>
9	Poor Uniformity / Shadow	<ul style="list-style-type: none"> <li>- Ensure the Projection Screen without dirt</li> <li>- Ensure the Projection Lens is clean</li> <li>- Ensure the Brightness is within spec. (Replace the Lamp if the Brightness is less than spec.)</li> <li>- Ensure DMD Chip is clean</li> <li>- Check Engine Module</li> </ul>
10	Dead Pixel / Dust (Out of spec.)	<ul style="list-style-type: none"> <li>- Ensure the Projection Screen without dirt</li> <li>- Ensure the Projection Lens is clean</li> <li>- Clean DMD Chip and Engine Module</li> <li>- Check DMD Chip</li> <li>- Check Engine Module</li> </ul>
11	Garbage Image	<ul style="list-style-type: none"> <li>- Ensure the Signal Cable and Source work as well</li> <li>- Check Main Board</li> <li>- Check DMD Board</li> </ul>

No	Symptom	Procedure
12	Remote Control / Control Panel Failed	<ul style="list-style-type: none"> <li>- Remote Control           <ul style="list-style-type: none"> <li>a. Check Battery</li> <li>b. Check Remote Control</li> <li>c. IR Receiver</li> </ul> </li> <li>- Control Panel           <ul style="list-style-type: none"> <li>a. Check FPC</li> <li>b. Check Keypad</li> <li>c. Check Main Board</li> </ul> </li> </ul>
13	Function Abnormal	<ul style="list-style-type: none"> <li>- Do “Reset” of the OSD Menu</li> <li>- Check Main Board</li> <li>- Check DMD Board</li> </ul>
14	WLAN & LAN Fail (only for P1266i)	<ul style="list-style-type: none"> <li>- Ensure you have set up the right IP address and the connection is OK (network LED should be light up)</li> <li>- Check the Antenna</li> <li>- Check the Wireless Module</li> <li>- Check the Main Board</li> </ul>

No	Symptom	Procedure
15	Forgetting Password (administrator Password)	<p>- An unique Universal Password which is printed on the Security Card. This unique password is a back door of Administrator Password which will be accepted by projector anytime no matter what the Administrator Password is.</p> <p>- How to get the Universal Password?</p> <p>(1) Click the “AcerSNID”</p>  <p>(2) Input SNID number.(SNID number is on the Security Card)</p>  <p>(3) Click“Calculate”.Then the Universal Password will appear.</p> 

# **Function Test & Alignment Procedure**

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## **4-1 Test Equipment Needed**

- IBM PC with XGA resolution and Wireless Network Card
- DVD player with Multi-system (NTSC/PAL/SECAM), equipped "Component", "S-Video" , "Composite" and "HDMI".
- HDTV Source (480P, 720P, 1080P)
- Minolta CL-100
- Quantum Data 802B or CHROMA2327 (Color Video Signal & Pattern Generator)
- After changing parts, check the information below.

## **4-2 Service Mode**

1. Turn on the projector and input the signal
2. Do the following actions sequentially to get into service mode
  - (1) Press "Power→Left→Left→Menu".
  - (2) Service mode will be shown.
  - (3) After confirming the configuration, press "Exit" to exit.

## **4-3 OSD Reset**

1. After final QC step, we have to erase all saved change again and restore the OSD default setting. The following actions will allow you to erase all end-users' settings and restore the default setting:
  - (1) Please get into OSD menu.
  - (2) To execute "Reset" function.

## 4-4 Test Condition

- Circumstance brightness: Dark room less than 5.0 lux.
- Inspection distance: 1.8 M~2.5 M functional inspection.
- Screen size: 60 inches diagonal
- After repairing each P1166 / P1266 / P1266i / P1166P / P1266P, the unit should be run-in (refer to the table below)

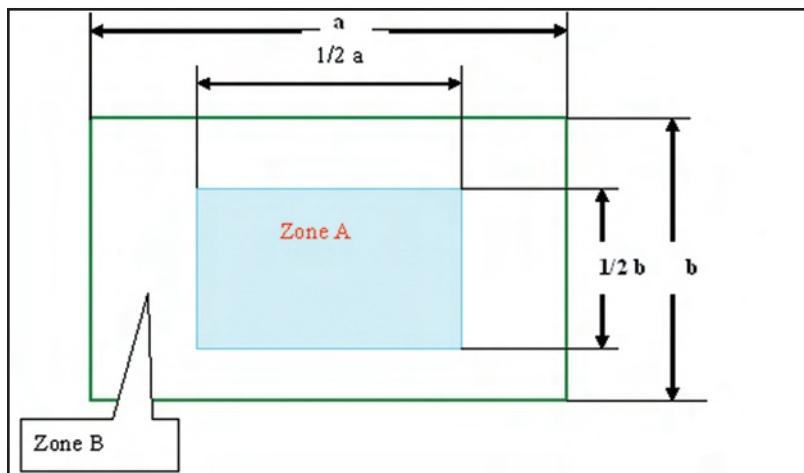
Symptom	Run-in Time
Normal repair	2 hours
NFF	4 hours
Auto shut down	6 hours

- Get into Burn-In Mode

\* Cycle setting is based on the defect symptoms. ie: If it is NFF, the run-in time is 4 hours. You have to set the lamp on for 50 min. and lamp off for 10 min for 4 cycles.

Press power > left > left > Menu	
Choose Burn-In Test > enter	
Lamp On (Min)	Press right key to adjust the time (50)
Lamp Off (Min)	Press right key to adjust the time (10)
Set burn in cycle	Press right key to adjust the cycle
After setting up the time, choose Burn-In mode and hit enter	

### Screen Defects (While replacing DMD Chip, DMD BD and MB)



< Figure: Zone A & B Definition >

## 4-5 Test Inspection Procedure

Charge parts Update	Main Board	Firmware	Color Wheel	Lamp Module	EDID	Lamp Driver
Version Update	v	v			v	
Color Wheel Index	v		v			
Reset lamp hour				v		
OSD Reset	v	v				
EDID	v					
Re-write Lamp Hour Usage	v					
Default Language Reset	v	v			v	
Waveform Download						v

Note: If Color appears abnormal after changing Main Board Module, please do Color Wheel index adjustment.

## 4-6 PC MODE

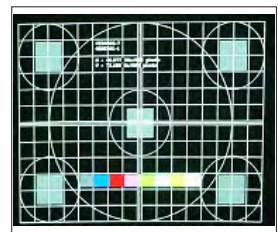
Note: Test signal: analog 800 x 600@60Hz (for P1166/ P166P),

analog 1024 x 768@60Hz (for P1266 / P1266i / P1266P). We take P1266 for example.

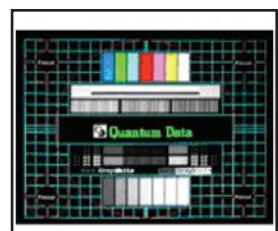
### 1. Frequency and tracking boundary

Procedure

- Test equipment: video generator.
- Test signal: analog 1024 x 768@60Hz
- Test Pattern: general-1 or master
- Check and see if the image sharpness is well-performed.
- If not re-adjust by the following steps:
  - (1) Select "Frequency" function to adjust the



General-1



Master

	<p>total pixel number of pixel clock in one line period.</p> <p>(2) Select "Tracking" function and use right or left arrow key to adjust the value to minimize video flicker.</p> <ul style="list-style-type: none"> <li>- Adjust Resync or Frequency/Tracking/H. Position/V. Position to the inner screen.</li> <li>- Eliminate visual wavy noise by Rsync, Frequency or Tracking selection.</li> <li>- Check if there is noise on the screen.</li> <li>- Horizontal and vertical position of the video should be adjustable to the screen frame.</li> </ul>
Inspection item	<ul style="list-style-type: none"> <li>- Check if there is noise on the screen.</li> <li>- Horizontal and vertical position of the video should be adjustable to the screen frame.</li> </ul>
Criteria	<ul style="list-style-type: none"> <li>- If there is noise on the screen, the product is considered as failure product.</li> <li>- If there is noise on the screen, use auto or manual "frequency" function or "tracking" function to adjust the screen.</li> <li>- The PC mode functionally sure be workable include support format with frequency and auto detected functional will be workable.</li> </ul>

## 2. Light Leak

Procedure	<ul style="list-style-type: none"> <li>- Test equipment: video generator.</li> <li>- Test signal: analog 1024 x 768@60Hz</li> <li>- Test Pattern: gray 30 patterns</li> <li>- Check if the light leaks.</li> <li>* Light leak on reflective edge, eyecatcher, bond-wires and exposed metal.</li> </ul>
Inspection item	<ul style="list-style-type: none"> <li>- Light leak check.</li> <li>- Bright blemish (dirty).</li> </ul>
Criteria	<ul style="list-style-type: none"> <li>- The pattern can accept four bright leakage at most on gray 30 pattern.</li> <li>- Ref. the Defect specification table</li> </ul> <p>Note: The defect criteria follows TI specification.</p>



Gray 30

### 3. Blemish (Dark)

Procedure	<ul style="list-style-type: none"><li>- Test equipment: video generator.</li><li>- Test signal: analog 1024 x 768@60Hz.</li><li>- Test Pattern: blue 60</li></ul>
Inspection item	<ul style="list-style-type: none"><li>- Dark blemish check. (dirty)</li></ul>
Criteria	<ul style="list-style-type: none"><li>- It is acceptable to have four dark blemish at most on blue 60 pattern.</li><li>- Ref. the Defect specification table</li></ul> <p>Note: The defect criteria follows TI specification.</p>



*Blue 60*

### 4. Dead Pixel (Bright pixel)

Procedure	<ul style="list-style-type: none"><li>- Test equipment: video generator.</li><li>- Test signal: analog 1024 x 768@60Hz.</li><li>- Test Pattern: full black</li></ul>
Inspection item	<ul style="list-style-type: none"><li>- Bright pixel check.</li></ul> <p>Note: Frame dimension under operative zone1 inch</p>
Criteria	<ul style="list-style-type: none"><li>- Bright pixel is unacceptable.</li><li>- Ref. the Defect specification table</li></ul> <p>Note: The defect criteria follows TI specification.</p>



*Full black*

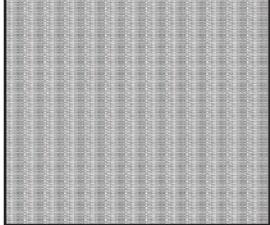
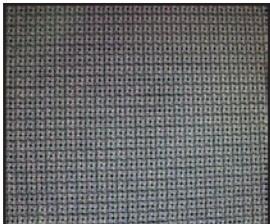
### 5. Dead Pixel (Dark pixel)

Procedure	<ul style="list-style-type: none"><li>- Test equipment: video generator.</li><li>- Test signal: analog 1024 x 768@60Hz.</li><li>- Test Pattern: full white</li></ul>
Inspection item	<ul style="list-style-type: none"><li>- Dead pixels check.</li><li>- White pattern (IRE=100)</li><li>- Adjacent dark pixel.</li></ul>
Criteria	<ul style="list-style-type: none"><li>- The number of the dead pixels should be less or equal to 6 pixels.</li><li>- Adjacent pixel with each other is unacceptable.</li><li>- Ref. the Defect specification table</li></ul> <p>Note: The defect criteria follows TI specification.</p>

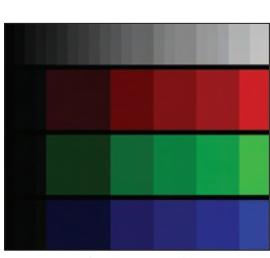
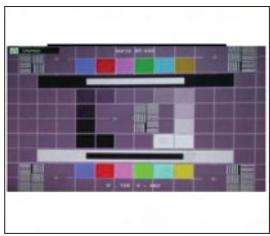


*Full white*

## 6. Focus test

Procedure	<ul style="list-style-type: none"> <li>- Test equipment: video generator.</li> <li>- Test signal: analog 1024 x 768@60Hz</li> <li>- Test Pattern: full screen or MEME Sony</li> </ul>	
Inspection item	<ul style="list-style-type: none"> <li>- Focus check</li> </ul>	
Criteria	<ul style="list-style-type: none"> <li>- From screen 1.95 M via visual to check the focus, look at the entire screen, focus shall be clear, crisp, and sharp over the entire surface of the display pattern. (Blur word on one of the corner after adjustment is acceptable. However, the word should at least be recognizable.)</li> </ul>	<i>MEME Sony</i>

## 7. Color performance

Procedure	<ul style="list-style-type: none"> <li>- Test equipment: video generator.</li> <li>- Test signal: HDMI 720p, 1080P</li> <li>- Test Pattern: Master, In focus II or SMPTE RP-133</li> <li>* Please refer to 4-2 to get into service mode. Use 720P &amp; 1080i signal, master pattern to do HDTV test. Color cannot discolor to purple and blue.</li> </ul>	
Inspection item	<ul style="list-style-type: none"> <li>- Check if each color level is well-functioned.</li> <li>- color saturation</li> </ul>	
Criteria	<ul style="list-style-type: none"> <li>- Screen appears normal. It should not have any abnormal condition, such as lines appear on the screen and so on.</li> <li>- Color appears normal.</li> <li>- It is acceptable to have few lines flashing at the center and on the edge of 1080i image. However, rest of the image should appears stable.</li> <li>- RGBW should all appear normal on the screen and sort from R -G-B-W.</li> <li>- Color levels should be sufficient and normal.</li> </ul>	<i>InFocus II / 64 gray RGBW</i>  <i>SMPTE RP-133</i>

(the unidentified color levels on both left and right sides should not over 8 color levels.)

- Gray level should not have abnormal color or heavy lines.
- The PC mode functionally sure be workable include support format with frequency and auto detected functional will be workable

## 4-7 PC calibration

### Procedure

- Test equipment: video generator
- Once main board is changed, PC calibration should be done as well.
  - (1) Test signal analog: 1024 x 768@60Hz
  - (2) Test pattern: White(up) Black(down)
- Note
  - (1) Calibration pattern should be in fill screen mode.
  - (2) Please refer to 4-2 and 4-3 to get into Service Mode and OSD Reset.
  - (3) Choose and access PC Calibration for correction in service mode. Choose "menu" to leave the service mode after all.



White/Black

### Check pattern

- Test signal: analog 1024 x 768@60Hz
- Test pattern: In focus II or 64 gray RGBW
  - \* After finishing ADC adjustment, check 64 gray RGBW pattern.



In focus II  
/64 gray RGBW

### Inspection item

### Criteria

- Color saturations
- There should not have any lack of RGBW. The color should appear normal and sort in right order.
- Color levels should be sufficient and normal. (the unidentified color levels on both left and right sides should not over 8 color levels.)
- Gray level should not have abnormal color or heavy lines.

## 4-8 Defect specification table

Order	Symptom	Pattern	Criteria
1	Bright pixel ( dots)	Black pattern ( IRE=0)	A+B=0
2	Dark pixel(dots)	White pattern	A+B=6
3	Unstable pixel (dots)	Any pattern	A+B=1
4	Adjacent dark pixel (dots)	Any pattern	A+B=0
5	Dark blemish (Dirty)	Blue 60 pattern	A+B=4 (diameter <1/2 inch)
6	Bright blemish (Dirty)	Gray 30 pattern	A+B=4 (diameter <1/2 inch)
7	Bright dot on frame	Black pattern	2

## 4-9 Video Performance

### 1. CVBS

- |                     |   |
|---------------------|---|
| Procedure           | - Test equipment: DVD player  |
|                     | - Test signal: CVBS   |
| Inspection item     | - Video performance test  |
| Inspection Distance | - 1.8 M ~2.5 M  |
| Criteria            | <ul style="list-style-type: none"> <li>- Check any abnormal color, line distortion or any noise on the screen.</li> <li>- Check the sound from speakers.</li> </ul> |



Motion video

## **2. S-Video**

Procedure	- Test equipment: DVD player - Test signal: S-Video
Inspection item	- Video performance test
Inspection Distance	- 1.8 M ~2.5 M
Criteria	- Check any abnormal color, line distortion or any noise on the screen. - Check the sound from speakers.

## **3. HDTV/ Component**

Procedure	- Test equipment: DVD player - Test signal: YCbCr/YPbPr
Inspection item	- HDTV performance test
Inspection Distance	- 1.8 M ~2.5 M
Criteria	- Check any abnormal color, line distortion or any noise on the screen. - Check the sound from speakers.

## **4. Audio Test**

Procedure	- Test equipment: DVD player - Test signal: CVBS
Inspection item	- Audio performance test
Inspection Distance	- 1.8 M ~2.5 M
Criteria	- Check the sound from speakers. - Check "Volume" is normal - Check "Mute" is normal

## **5. HDMI Test**

Procedure	- Test Signal : 1080i - Equipment: DVD Player with HDMI output
Inspection item	- HDMI Test
Criteria	- Ensure if the image is well performed and the color can not discolor.

## 4-10 Optical Performance Measure

Inspection Condition
- Environment luminance: 5 Lux
- Product must be warmed up for 3 minutes
- Distances from the screen: 1.95 M
- Screen Size: 60 inches diagonal

### 1. Test equipment

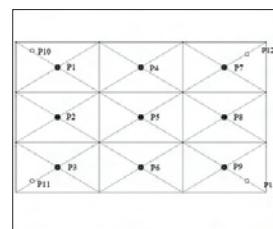
- Procedure
- Get into service mode: Press "Power→Left→Left→Menu".
  - Select "RD menu"
  - Select "Spoke test"

### 2. Brightness

- Procedure
- Full white pattern
  - Use CL100 to measure brightness values of P1~P9.
  - Follow the brightness formula to calculate brightness values.
- ☀ Brightness Formula
- $$\text{Avg. } (P1 \sim P9) \times 1.1m^2$$
- Criteria
- 1100 lumens (for P1166 / P1266)
  - 1200 lumens (for P1266i / P1166P / P1266P)

### 3. Full On/Full Off Contrast

- Procedure
- Full white pattern & full black pattern
  - Use CL100 to measure brightness values of full white pattern P5 & full black pattern B5 ( see image: full white)
  - Follow Contrast formula to calculate contrast values.
- ☀ Contrast Formula
- $$P5/B5$$



Full white pattern

	<p>Note: P5=center of white image B5=center of black image.</p> <p>Criteria</p> <ul style="list-style-type: none"> <li>• 1400: 1 (for P1166 / P1266)</li> <li>1900: 1 (for P1266i / P1166P / P1266P)</li> </ul>
--	---



Full black pattern

#### 4. Uniformity

Procedure	<ul style="list-style-type: none"> <li>- Full white pattern</li> <li>- Use CL100 to measure brightness values of P1~P9 (see image: full white).</li> <li>- Follow the Uniformity formula to calculate average values.</li> </ul> <p>💡 Uniformity Formula</p> $\text{ANSI Uniformity} = \text{Avg. (P1, P3, P7, P9)} / P5 \times 100\%$
Criteria	<ul style="list-style-type: none"> <li>• 65%</li> </ul>

## 4-11 Others

### 1. Functional Inspection

Keypad button	<ul style="list-style-type: none"> <li>- All keypad buttons must operate smoothly.</li> </ul>
General	<ul style="list-style-type: none"> <li>- All OSD functions must be checked for functionality. When OSD menu is displayed, there shall be no visible peaking, ringing, streaking, or smearing artifacts on the screen.</li> </ul>
Factory Default	<ul style="list-style-type: none"> <li>- The factory settings (with appropriate centring, size, geometry distortion, etc.) shall be displayed upon "Recall" is selected from OSD.</li> </ul>
Display Size	<ul style="list-style-type: none"> <li>- All preset modes shall expand to full screen size using OSD</li> <li>Horizontal and Vertical Size controls</li> </ul>
Display Data Channel (DDC)	<ul style="list-style-type: none"> <li>- The purpose of the DDC test is to verify the DDC1/ DDC2B operation of the projector and to verify Plug &amp; Play function.</li> </ul>

Acoustic - High pitch sound from cooling fan and color wheel is unacceptable.

## 2. Check points for exterior and print pattern

Check item	Check point
Text & Pattern	Missing letters & pattern or blurry prints are unacceptable
Exterior	Dirt, scrape, water ripples and uneven color are unacceptable
Buttons	Stuck buttons are unacceptable
Focus ring	Focus ring is functioning smoothly
Logo	Missing logo, missing prints and blurry prints are unacceptable
Screw	All screws should be fixed and in right type
Pedestal	Well-functioned
Lamp Cover	It should be locked in the correct place
Plastic Parts	All plastic parts can not be broken and damaged
Safety or warning label	All safety and warning label should be visible, including all contents
Connector	All interface connectors should be complete and workable

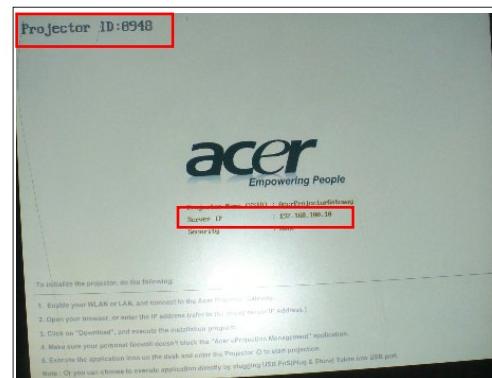
## 4-12 LAN and Wireless Function Test (only for P1266i)

### 1. Write down Projector ID and Server IP

- Plug in power cord to the projector and connect PC with projector by RJ45 cable.

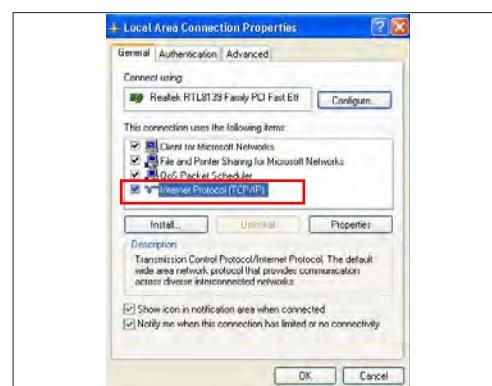


- Turn on the projector.
- Write down the Projector ID: "8948" and Server IP address: 192.168.100.10



### 2. Local Area Setting

- Right click the "Local area connection", then choose "Properties".
- Double click "Internet protocol(TCP/IP)".



- Modify the IP address to 192.168.100.12, and modify Subnet mask to 255.255.255.0.

*Note: The HOST ID (192.168.100.XXX) of PC IP address must be different from the Server IP address written down in step 1.*



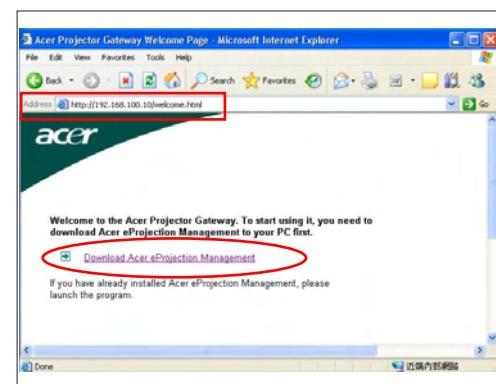
- Click "OK".

- Click "Close" to quit the setting screen.



### 3. Read Projector Information

- Execute "Internet Explorer".
- Visit the wireless card: <http://192.168.0.100/>.
- Click "Download Acer eProjection Management", then we will download the "Acer Projector Gateway" file.



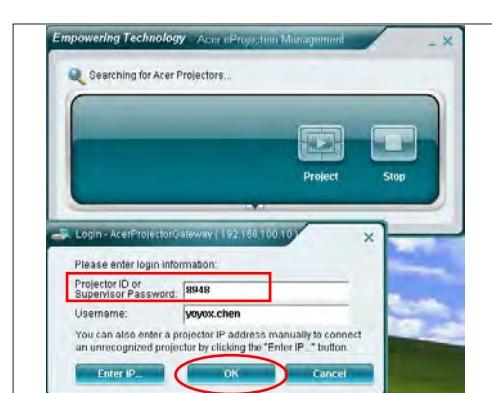
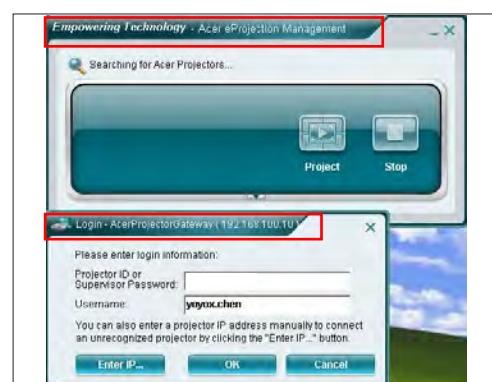
#### 4. Acer Projector Gateway Installation

- Double click "Acer.exe" file.
- Click "Next".
- "Empowering Technology - Acer eProjection Management" and "Login - AcerProjectorGateway" will appear on the screen, the Installation complete.



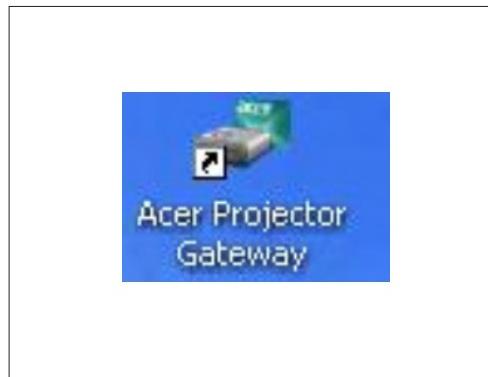
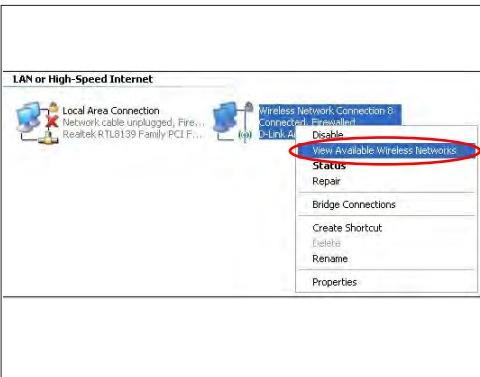
#### 5. LAN Function Test

- In "Projector ID or Supervisor Password" item, key in "8948" you have written down in step 1.
- Click "OK".
- The LAN Function should be OK if the projector projects PC signal.

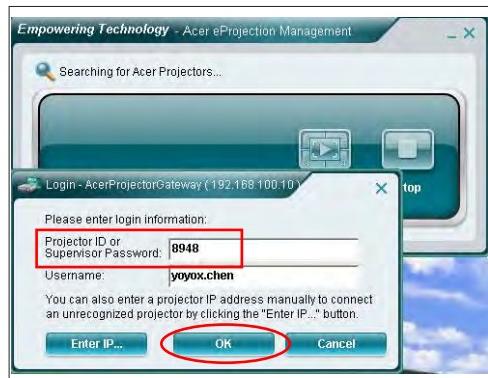


## 5. Wireless Network Function Test

- Unplug LAN Cable from Projector and PC.
- Right click "Wireless Network Connection", then choose "View Available Wireless Networks".
- "Wireless Network Connection" picture will appear on the screen, then double click "AcerProjectorGateway" to connect PC with wireless network.
- Double click "Acer Projector Gateway".
- "Empowering Technology - Acer eProjection Management" and "Login - AcerProjectorGateway" will appear on the screen, then key in "8948" that is you writed down the Projector ID.
- Click "OK".
- The Wireless Network Function should be OK if the projector projects PC signal.



*Note: If you want to get the better signal, you may use the aerial to connect the projector.*



# Firmware Upgrade

## 5-1 Equipment Needed

### Software : (DDP 2230- USB)

- DLP Composer
- Firmware
- 8M Flash (8M flash has to put in PC and set right path in 5-4 step 5)

*Note: Before firmware upgrade, extract 8M flash file to DLP composer files .( according to 5-4 step 1)*

### Hardware :

- Projector
- Power cord (42.53506G002)
- USB Cable (42.87304G001)
- PC or Laptop

*Note: The FW upgrade procedure for P1166 / P1266 / P1266i / P1166P / P1266P is the same. Here we take P1266 as an example.*



## 5-2 DLP Composer Lite Setup Procedure

1. Choose "DLP Composer Lite V7.1 Setup" Program.



2. Click "Next".

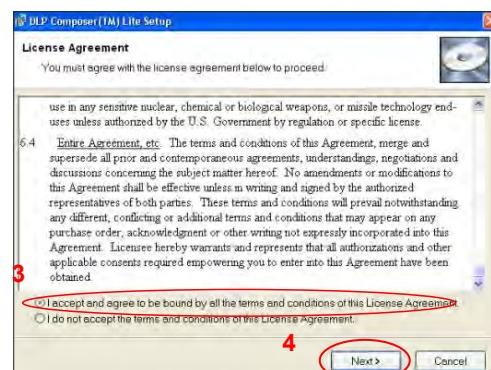
3. Read License Agreement.

- Choose I accept and agree to be bound by all the terms and conditions of this License Agreement.

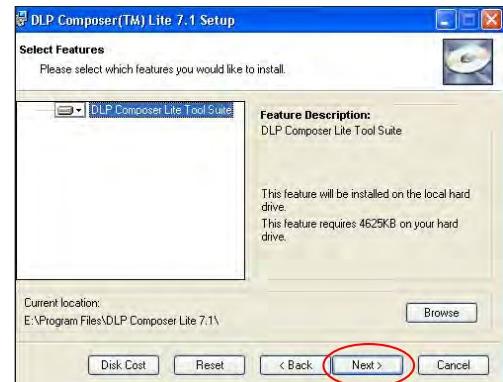


4. Click "Next".

5. Click "Next".

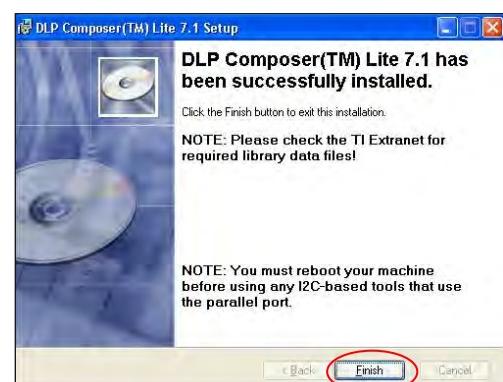
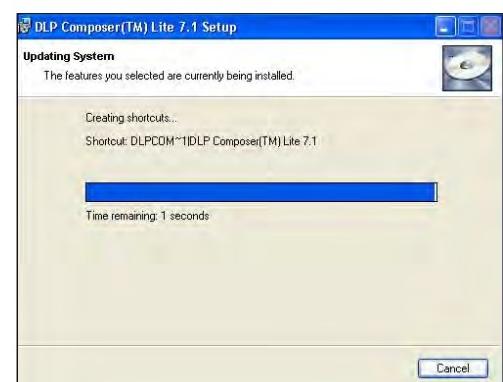
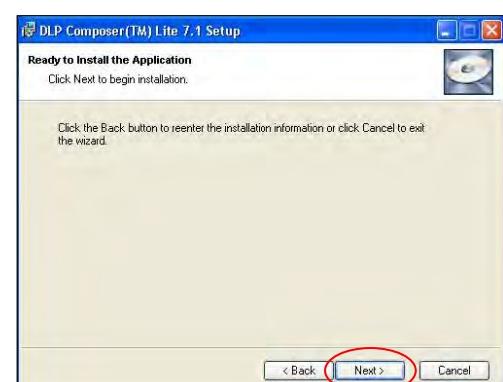


6. Click Next.



7. Click Next.

8. Writing system registry values.



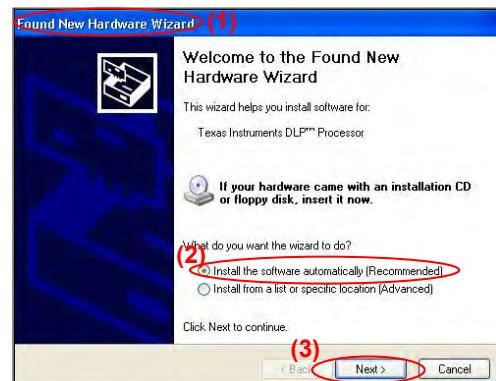
## 5-3 USB Driver Upgrade Procedure

### 1. set up

- Plug in Power cord to projector.
- Link PC USB port and projector USB port by USB Cable.

### 2. Execute Program

- (1) Found new hardware wizard will be appeared on the screen.
- (2) Select Install the software automatically (Recommended).
- (3) Then click Next.



### 3. Finish

- Click Finish to end the installation.

*Note: If you have installed the USB driver,  
there is no need to perform this action.*



## 5-4 Firmware Upgrade Procedure

1. Unzip "8M flash.rar" to "DLP Composer

Lite v7.1 Setup" files.

2. Set-up

- Hold on "Power" button and plug in power cord while holding on "Power".
- Once the Lamp LED and the Temp LED light on Red, plug in USB cable into the projector and link to the USB port of PC.

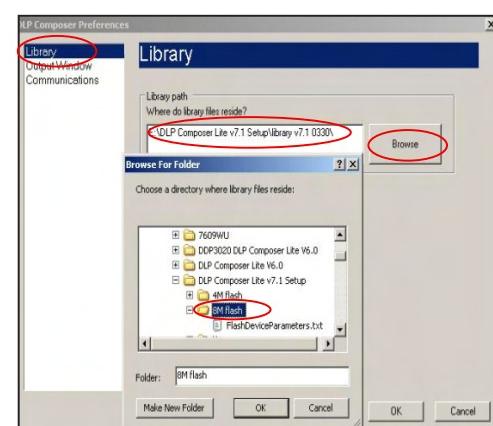
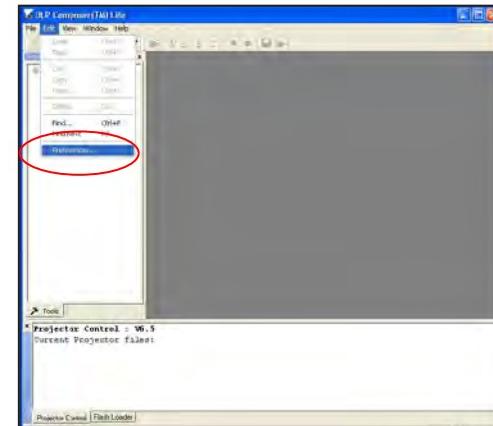
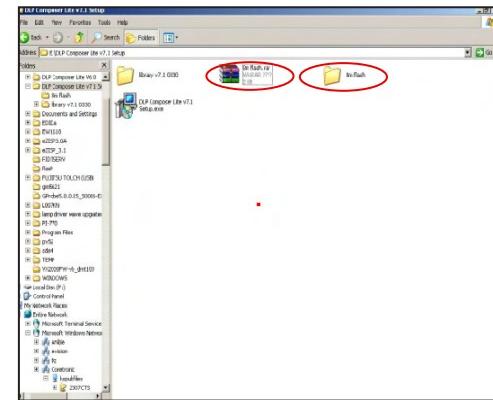
*Note: The system fan and the light will not operate.*

3. Execute the "DLP Compose(TM) Lite" file.

4. Click "Edit", then click "Preferences".

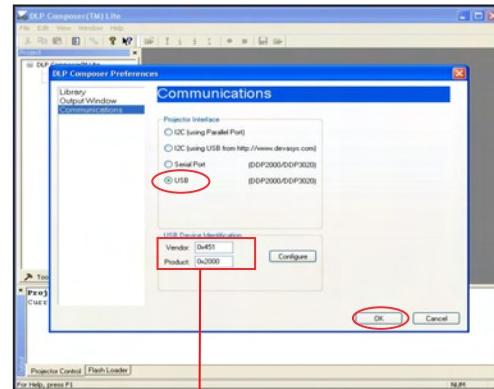
5. Click "Library".

- Click "Browse" button and navigate to the directory where you put the library file in.



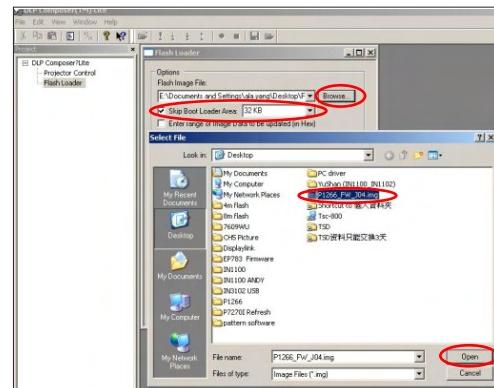
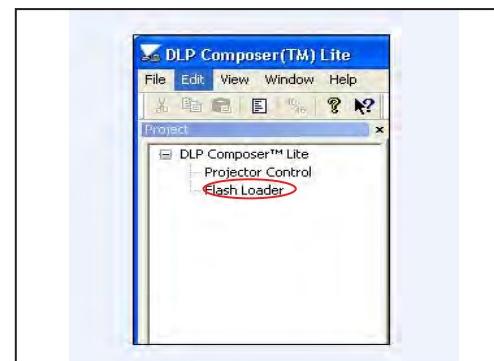
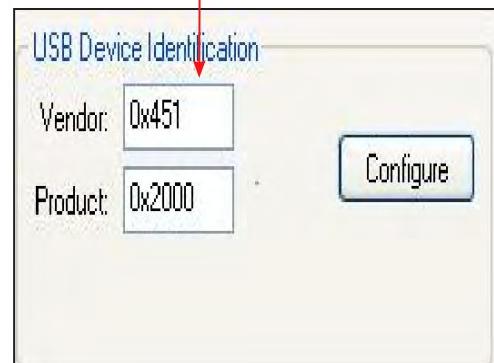
## 6. Select Edit\preferences\Communications

- Choose USB".
- Click OK".

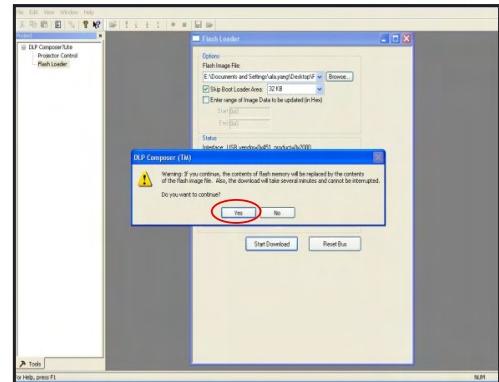


## 7. Choose Flash Loader.

- Select the item "Skip Boot Loader Area"  
(select 32KB)
- Click "Browse" to search the firmware file.
- Select the FW file (\*.img).
- Click "Open".



8. Click "Reset Bus" to erase the flash memory.



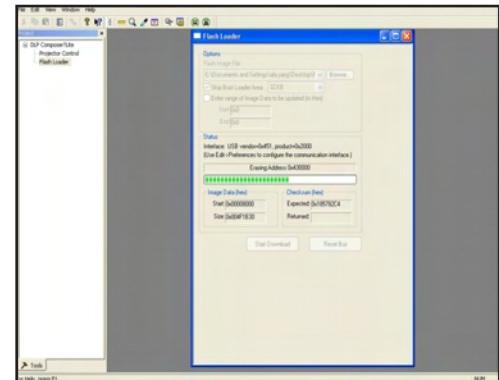
9. If the firmware is ready, click start download to process the firmware upgrade.

- Click "Yes" to erase the flash memory.

10. When firmware upgrade process is finished, the unit return to stand-by status.

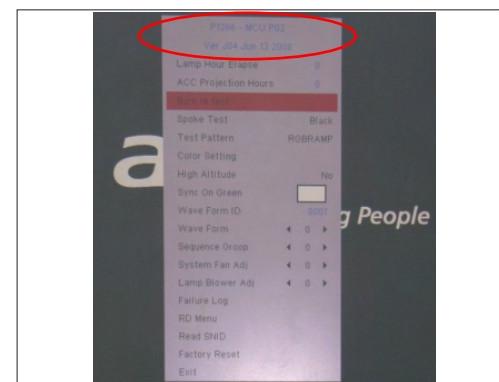
The LED power lights on and appears Red.

- Unplug USB cable and power cord and replug in power cable.



11. Restart the unit and enter the service mode to check the firmware version.

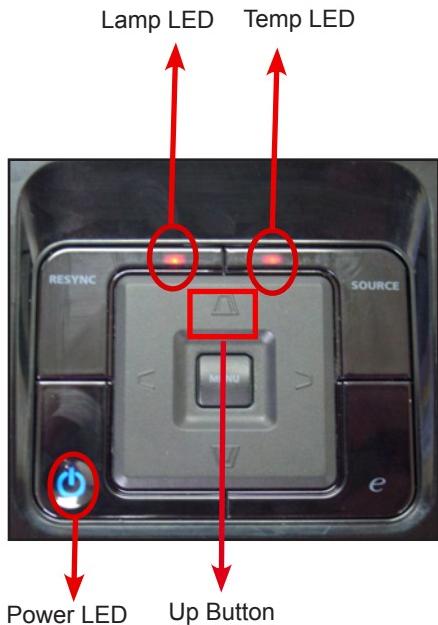
(To enter service mode, please refer to Chapter 4 Function Test and Alignment Procedure)



## 5-5 Waveform Download

1. Hold on the “up” button, then plug power cord in, the Power LED light on red, after about 5 seconds, it turns to blue and Temp LED will flash for 4 seconds. After that, the Temp LED and Lamp LED light on red, and Power LED lights blue.
2. Re-plug in power cord and turn on this projector. If the image is steady, the process is completed.

*Note: When the Lamp Driver is changed,  
you must download the Lamp Driver  
Waveform.*



# EDID Upgrade

---

## 6-1 EDID Introduction

Extended Display Identification Data is a VESA standard data format that contains basic information about a display device and its capabilities, including vendor information, maximum image size, color characteristics, factory pre-set timings, frequency range limits, and character strings for the monitor name and serial number.

The information is stored in the display and is used to communicate with the system through a Display Data Channel (DDC), which sits between the display device and the PC graphics adapter. The system uses this information for configuration purposes, so the monitor and system can work together.

*Note:* - If a display device has digital input ports, like DVI or HDMI, but without EDID in its main board, the display device will show no image while the input source is digital signal.

- The EDID upgrade procedure for P1166 / P1266 / P1266i / P1166P / P1266P is the same, here we take P1266 for example. After the EDID upgraded, do the "Default Language Reset".

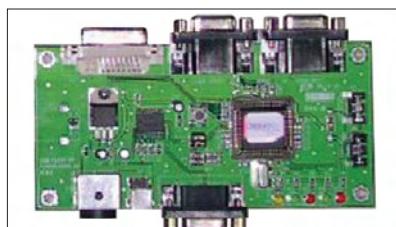
## 6-2 Equipment Needed

### Software

- EDID Program (Generic V0.51)
- EDID File

### Hardware

- Projector
- Generic Fixture (80.00001.001) for EDID Key-in (Fixture: JP3 must be closed)
- Power cord for Projector (42.53506G002)
- RS-232 9 Pin Cable (pin to pin, F-M) (42.83C07G001)
- Monitor
- PC
- VGA cable (42.87305G102)
- DVI Cable (42.83N06G001)
- Power adapter (47.57803G001) and power cord (42.53506G002) for fixture
- Adapter HDMI(M) to DVI-D(F) (42.82B13G001)



## 6-3 Setup Procedure (VGA)

### 1. Connect all ports

- (1) Connect P1 of Fixture with COM Port of PC/Laptop by RS232 Cable.
- (2) Connect P2 of Fixture with VGA port of Projector by VGA Cable.
- (3) Plug Power Adapter to Power CNN.
- (4) Plug Power Cord to projector.

*Note: You must confirm that the JP3 is closed in all procedure.*



## 6-4 EDID Key-In Procedure

### 1. Execute EDID Program

- (1) Click on "EDID" to execute EDID program.

### 2. Process

- (1) Check the COM port is COM 2"  
(Select the COM port which you are using).
- (2) Click the Model button.
- (3) Choose the source file "ACER\_P1266 EDID-B.ini (\*.ini)" and then open it.

### 3. Process

- (1) Key in the serial number into the barcode blank space.
- (2) In Write Source Select item,select Analog.
- (3) Click "Program" button.

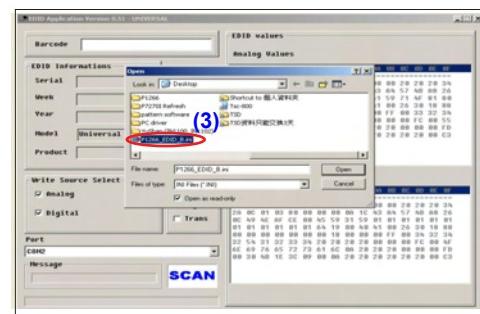
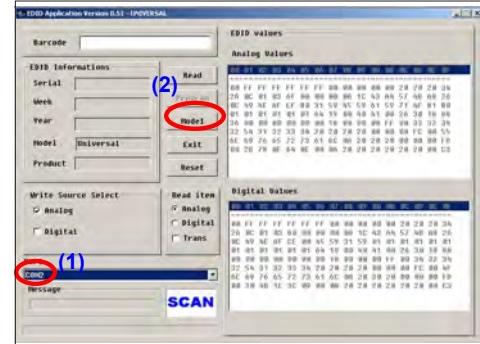
### 4. Process

- (1) "Please change the cable to Analog" will be shown on the screen.
- (2) Please press "Ok" button.

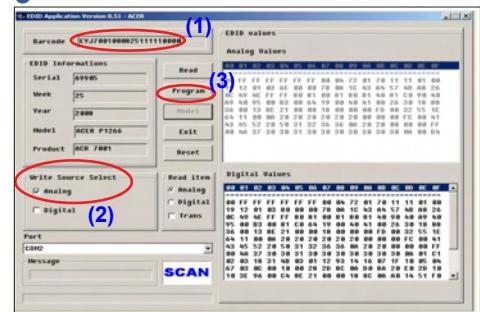
1



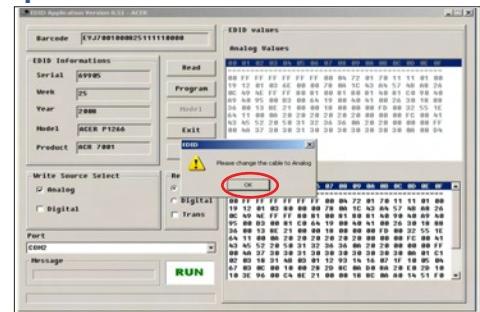
2



3



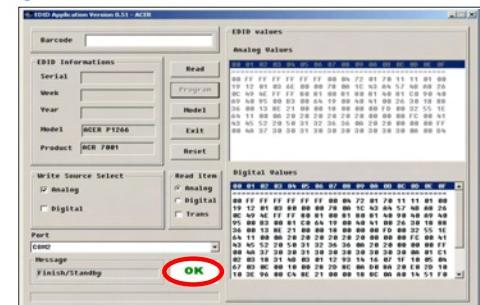
4



## 5. Finish

(1) "OK" will be shown on the screen.

5

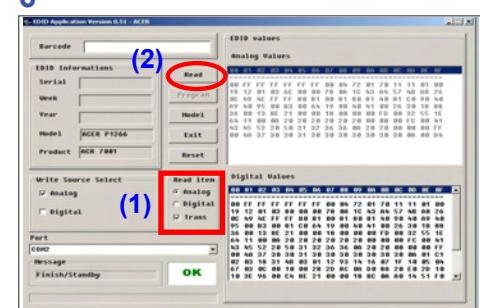


## 6. Read EDID information

(1) In the Read item,select "Analog" and "Trans".

(2) Please press "Read" button.

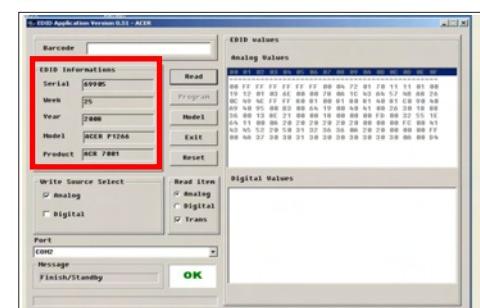
6



## 7. Read EDID information

(1) EDID Informations will show the result.

7

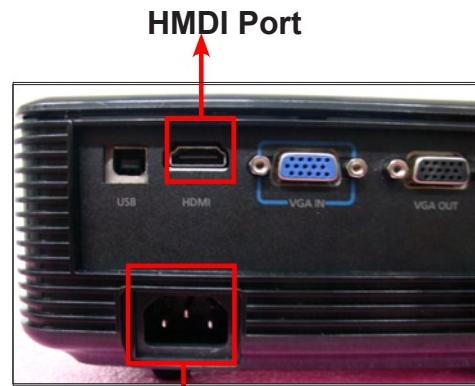


## 6-5 Setup Procedure (HDMI)

1. Connect all ports

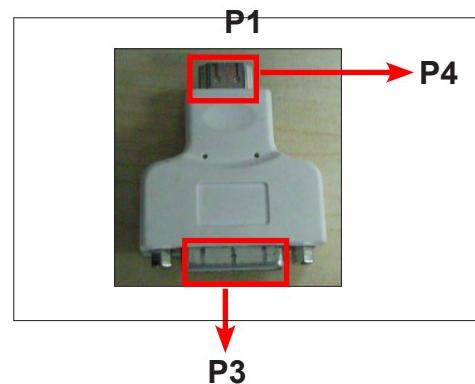
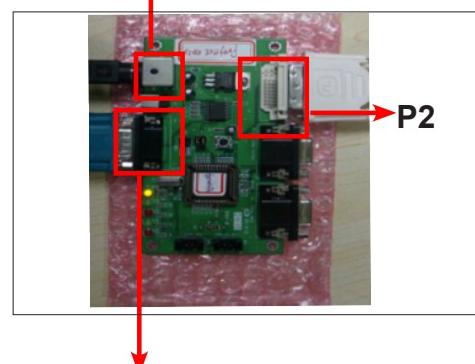
- (1) Connect P1 of Fixture with COM Port of PC/Laptop by RS232 Cable.
- (2) Connect P2 of Fixture with P3 by DVI Cable.
- (3) Plug P4 to HDMI Port of the Projector.
- (4) Plug Power Adapter to Power CNN.
- (5) Plug Power Cord to P12660 unit.

*Note: Confirm JP3 is Close status.*



Power Port

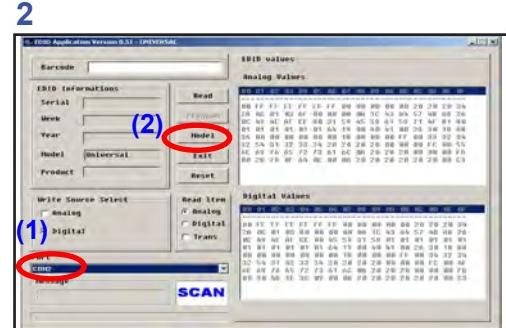
Power CNN



P3

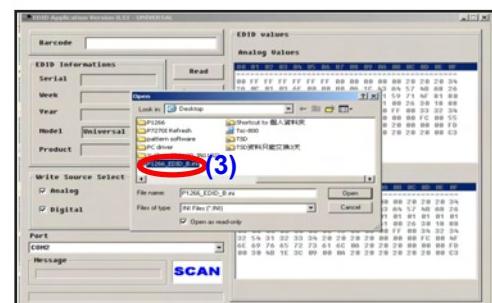
## 2. Process

- (1) Check the COM port is "COM 2"  
(Select the COM port which you are using).
- (2) Click the "Model" button.
- (3) Choose the source file "ACER\_P1266 EDID-B.ini" and then open it.



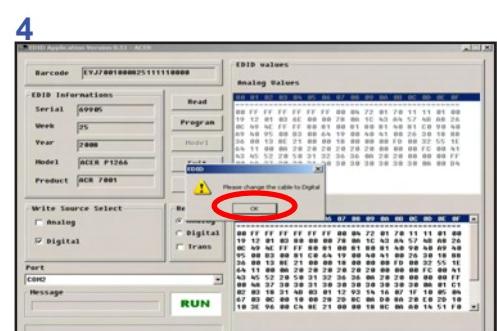
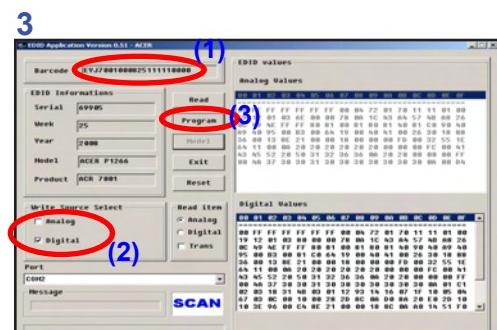
## 3. Process

- (1) Key in the serial number into the barcode blank space.
- (2) In "Write Source Select" item, select "Digital".
- (3) Click "Program" button.



## 4. Process

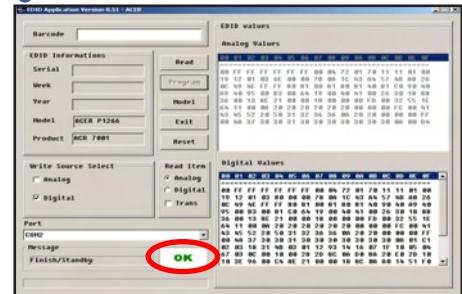
- (1) "Please change the cable to Digital" will be shown on the screen.
- (2) Please press "Ok" button.



## 5. Finish

(1) "OK" will be shown on the screen.

5

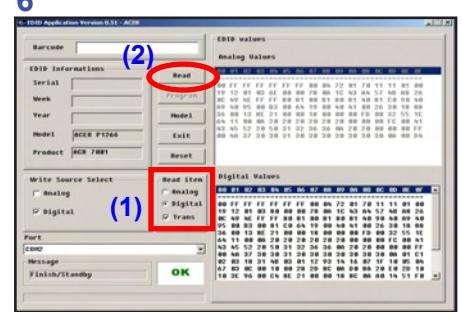


## 6. Read EDID information

(1) In the Read item, select "Digital" and "Trans".

(2) Please press "Read" button.

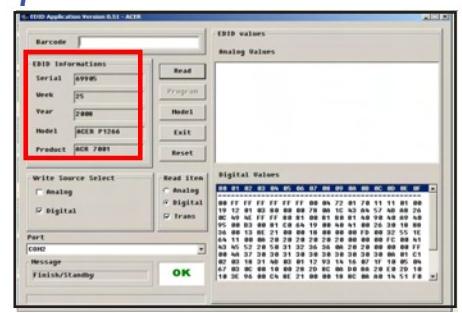
6



## 7. Read EDID information

(1) EDID Informations will show the result.

7



## 6-6 Default Language Reset

(1) Hold on “Down” button then plug in the Power Cord.

*Note: At this moment, Power LED turns blue while Temp LED flashes in red for about 4s, then release the “Down” button.*

(2) After that, please check the LED status and judge the actions as the following table:

LED Status	Result
Power(blue)+TEMP(red)+LAMP(red)	OK
Power(blue)+TEMP(red)	Fail

*Note: if fail, please do the actions as bellow steps item (1)-(2)*

S/N General rule:

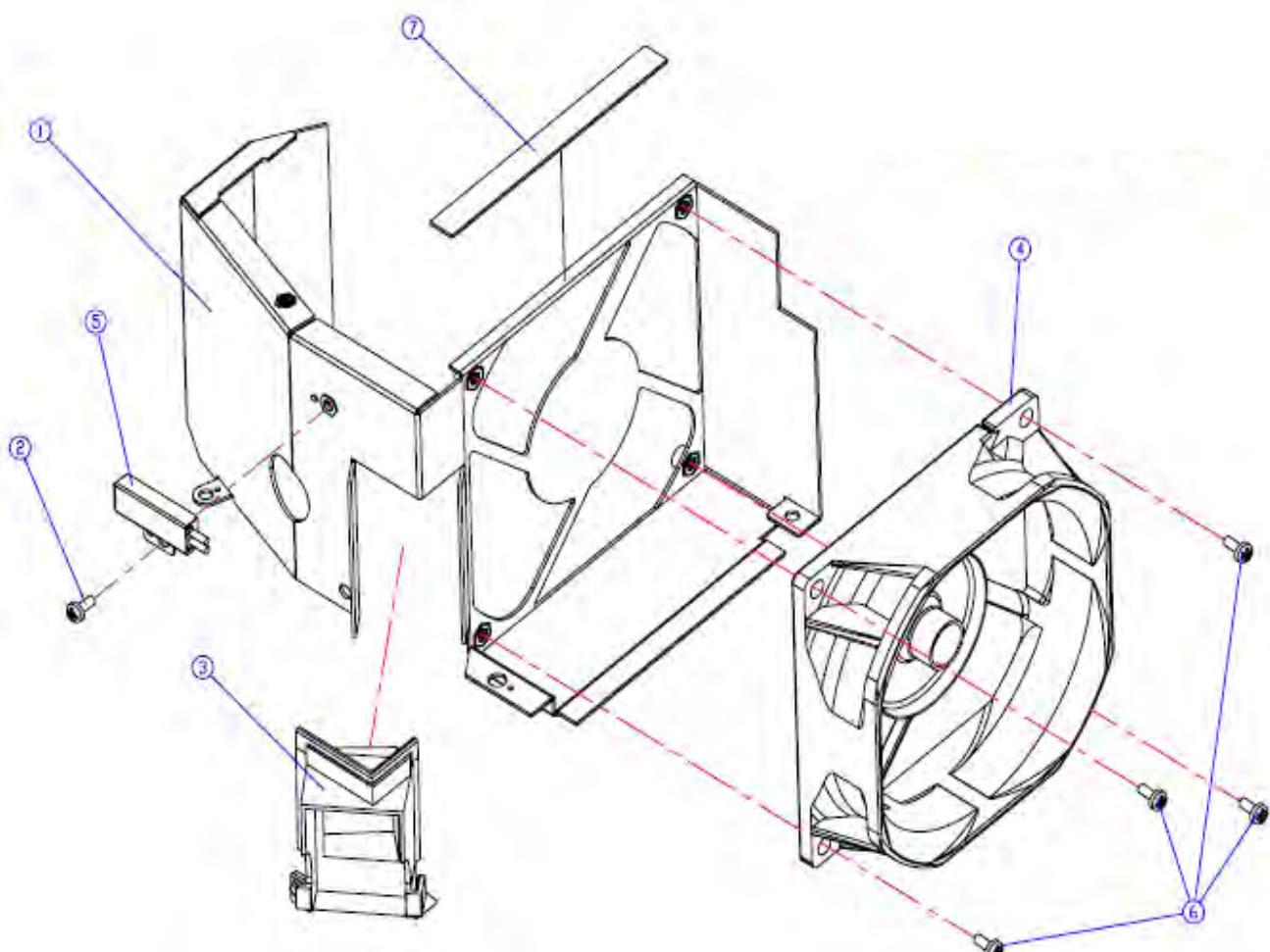


Use the last 1 digit code (as red word) for language information

Language code(F)	Default Language
1	English
2	Thailand
3	Japan
4	TC
5	SC
6	Russian
7	Germany
8	Hungarian

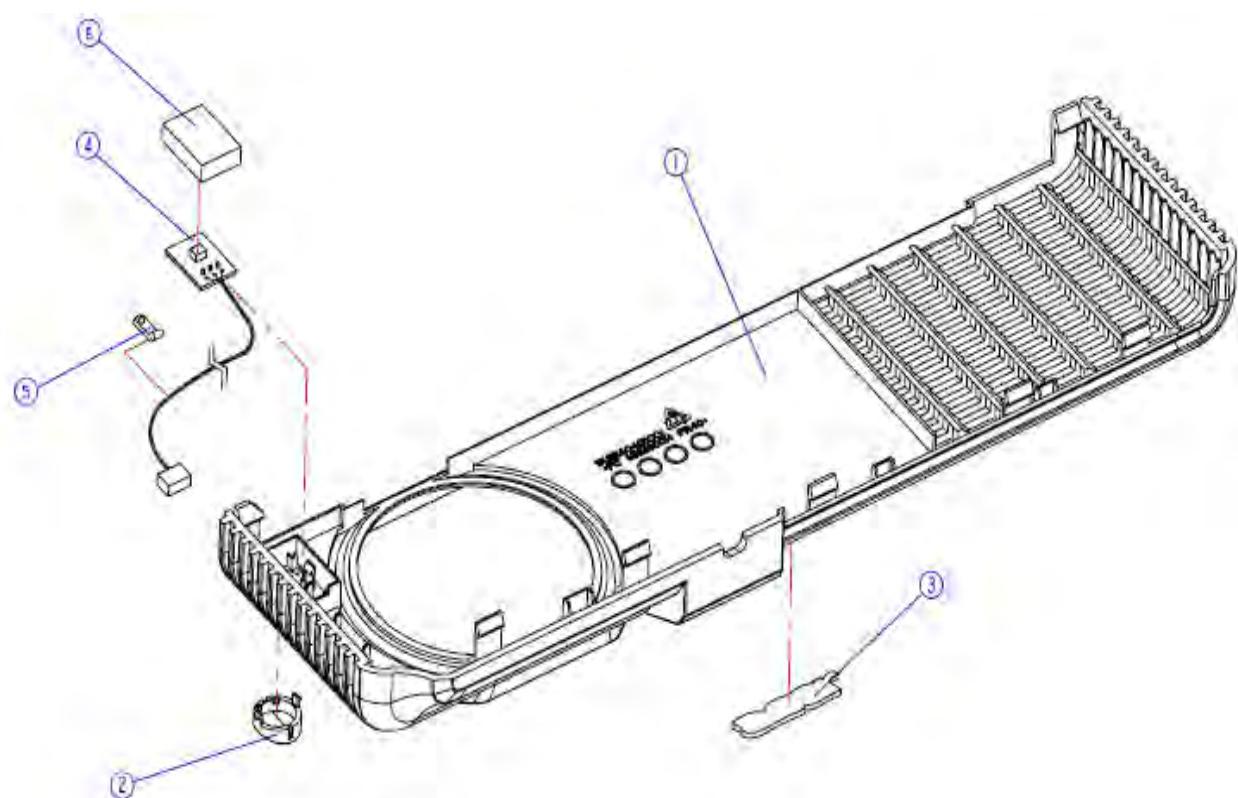
# Appendix A

## ASSY FAN SHIELDING MODULE



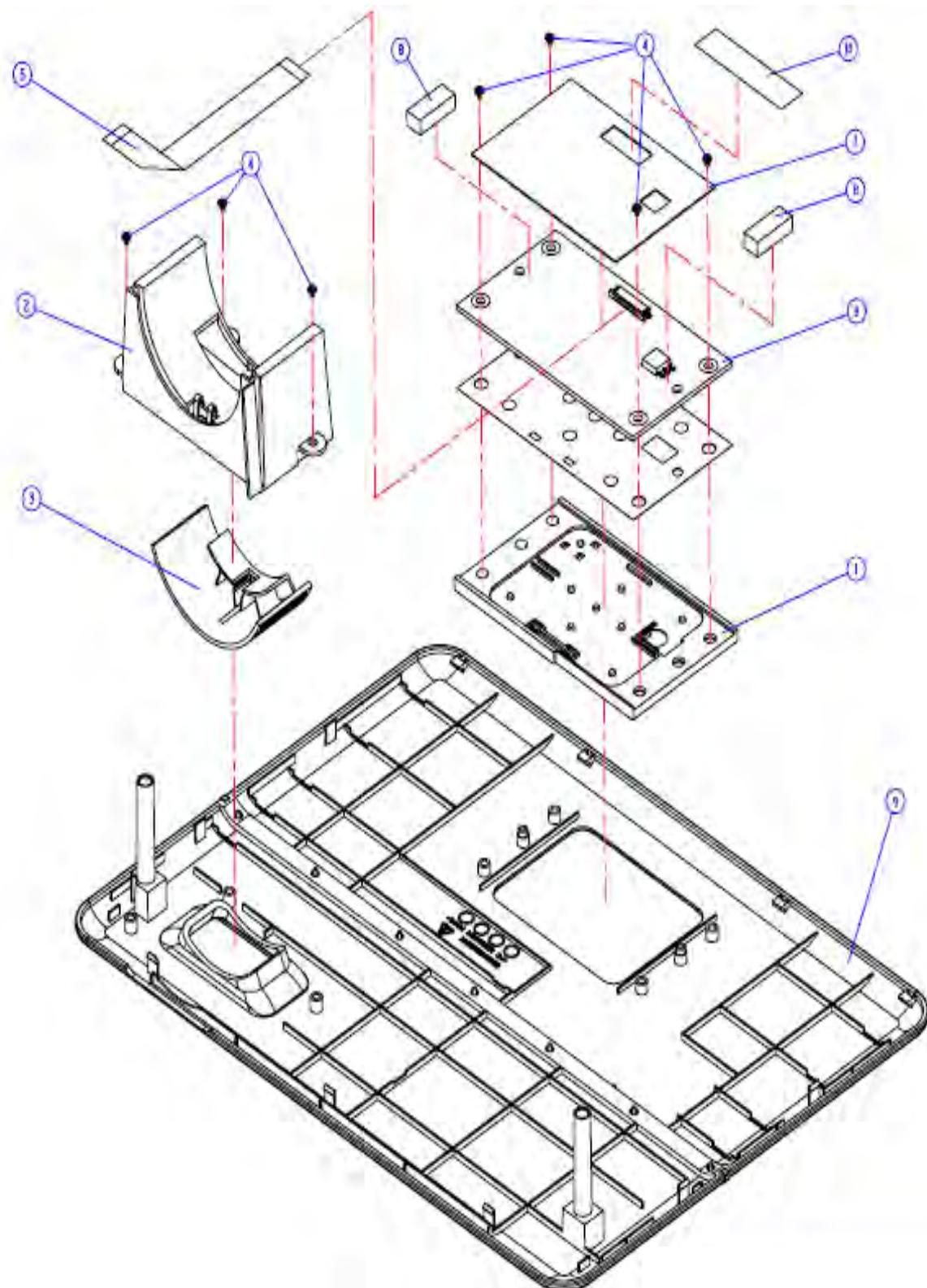
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
	70.8BA18GR01	ASSY FAN MODULE P1266(SERVICE)	V
1	61.8BA04G002	FAN SHIELDING P1166	
2	85.0A123G050	SCREW P/F MECH M3*5 Ni	
3	52.8BA05G001	LAMP BLOWER RUBBER P1266	
4	49.8BA01G001	SUNON 80*25MM AXIAL FAN (125C)	
5	43.8BB01G001	THERMAL SWITCH WITH BRACET	V
6	85.1A323G080	SCREW PAN MECH M3*8 BLACK "GRE	
7	41.82V10G001	EMIGASKETW6*H2*L72.5mm PD120	

## ASSY FRONT COVER MODULE



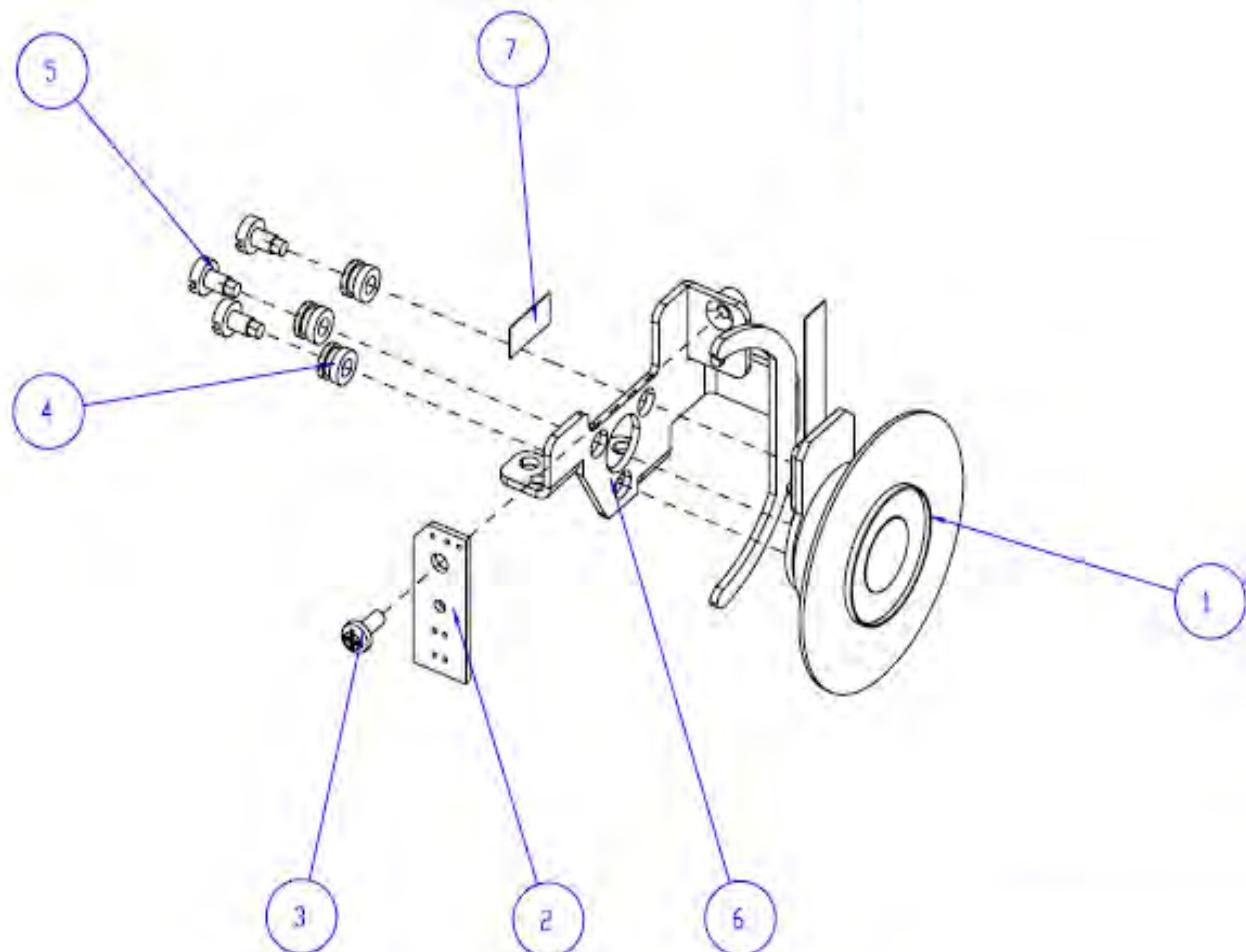
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
	70.8BA20GR01	ASSY FRONT COVER MODULE P1266(SERVICE)	V
1	51.8BA04G002	FRONT COVER P1166	
2	51.87H09G001	FRONT IR LENS XD1171D	
3	61.8BA12G001	ACER LOGO P1266	
4	80.87M05G001	PCBA IR SENSOR BD FOR EP761	V
5	61.00079G001	GROUNDING CABLE CLAMP FN-008	
6	51.8BA21G001	IR MYLAR P1266	

## ASSY TOP COVER MODULE



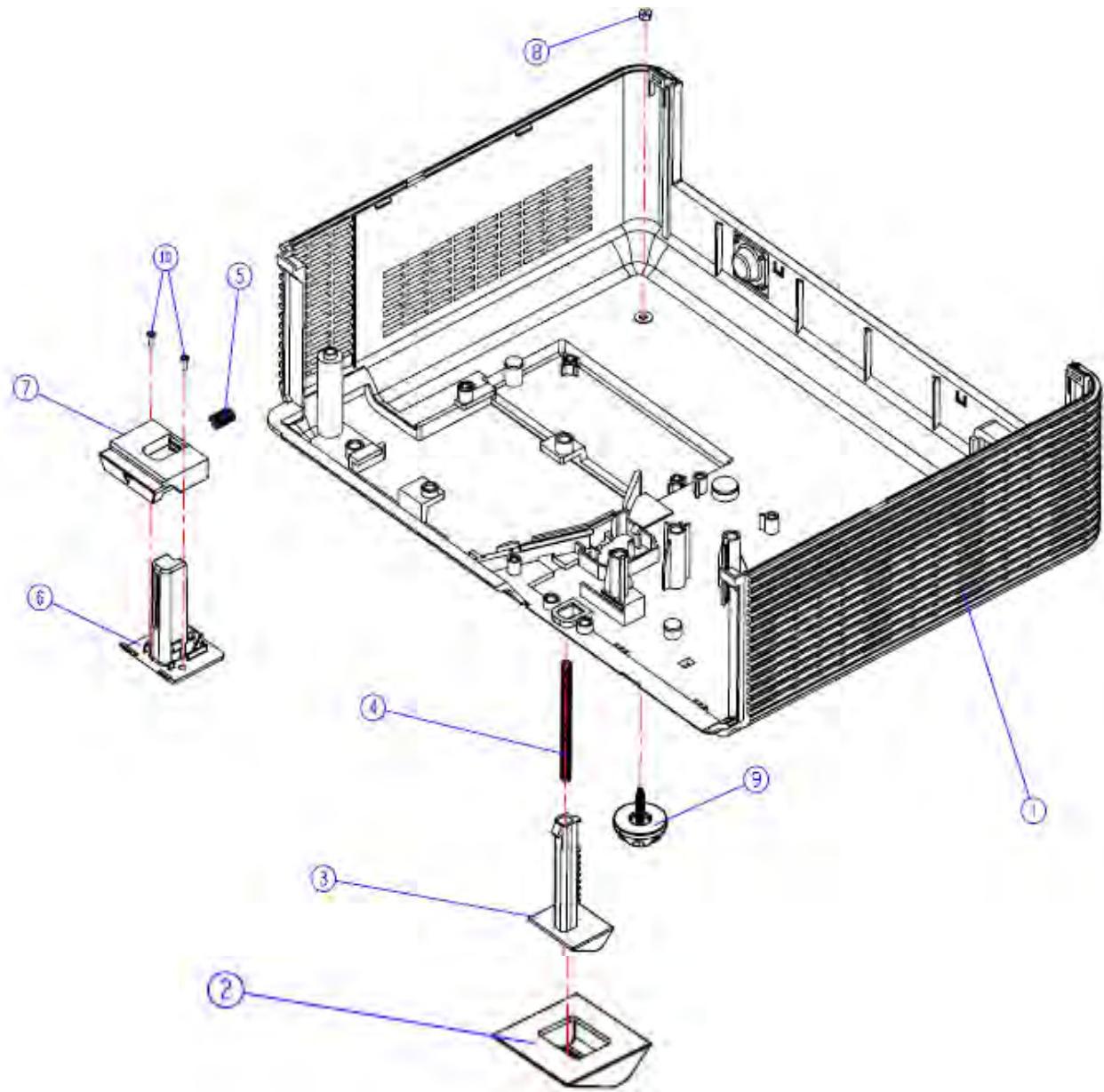
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
	70.8BA21GR01	ASSY TOP COVER MODULE P1266(SERVICE)	V
1	51.8BA16G002	KEYPAD MODULE P1166	
2	51.8BA11G002	ZOOM RING HOLDER P1166	
3	51.8BA12G002	ZOOM RING P1166	
4	85.YA123G040	SCREW(TAPPING FLAT HEAD NI M3*)	
5	42.00303G011	FFC KEYPAD TO M/B 24P P=0.5 11	V
6	80.8BA03G001	PCBA KEYPAD BD FOR P1266	
7	51.8BA18G002	KEYPAD MYLAR P1166	
8	41.83F21G001	GASKET /W*5,H*1.5,L*15	
9	75.8BA04G002	ASSY TOP COVER MODULE P1166	
10	51.81541G001	TAPE 3M J350 17*30MM	

## ASSY COLOR WHEEL MODULE



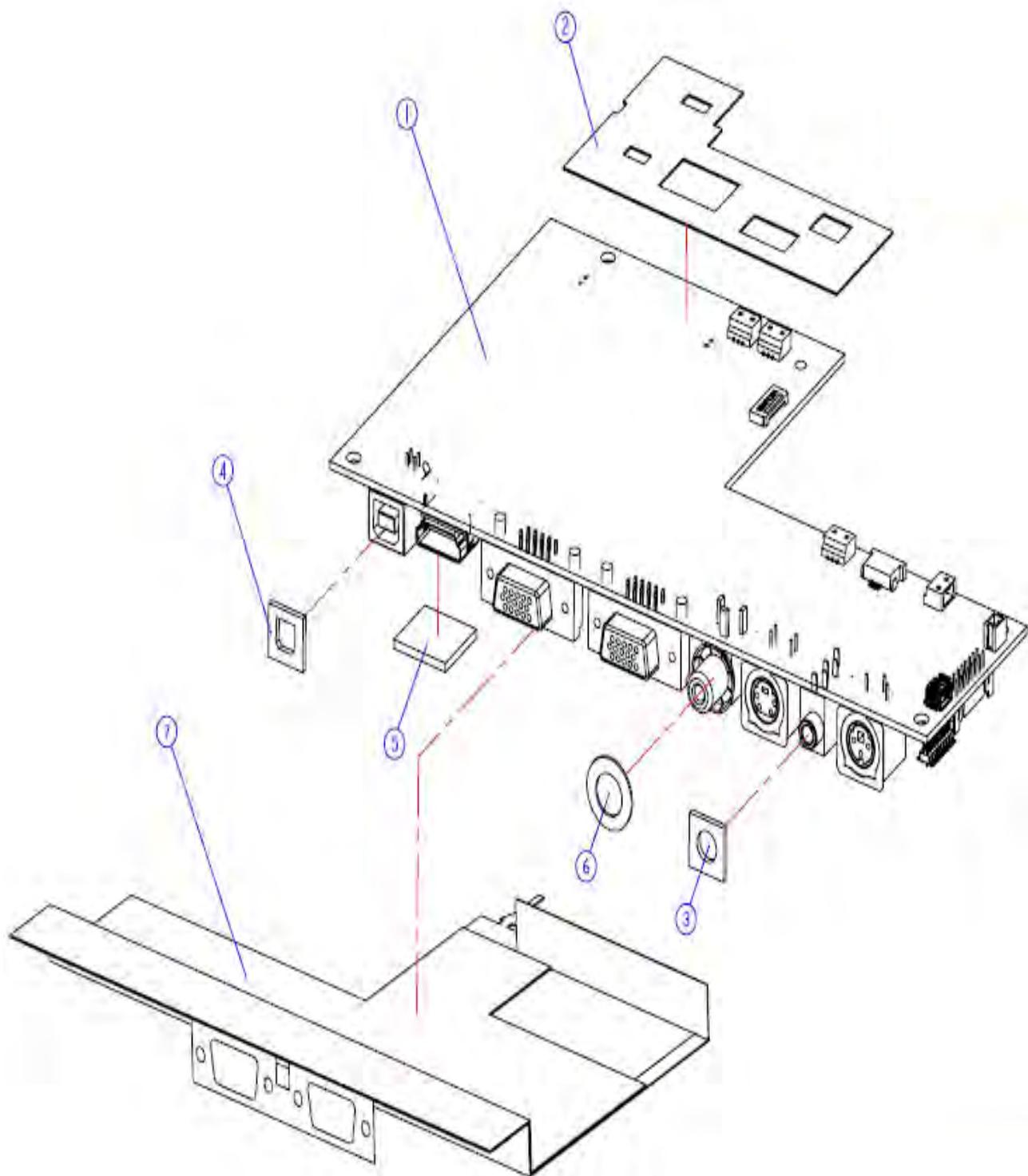
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
	70.8BA15GR01	ASSY COLOR WHEEL MODULE P1266(SERVICE)	V
1	23.8BA19G001	COLOR WHEEL YO 6SCW R85Y37G90C	
2	80.87Y04G001	PCBA PHOTO SENSOR BOARD FOR PD7280	V
3	85.1A126G040	SCREW PAN MECH M2.6*4 Ni	
4	52.83615G001	COLOR WHEEL DISC RUBBER, EzPro755	
5	61.83628G001	COLOR WHEEL SHOULDER SCREW,EzPro755	
6	61.88N10G001	COLOR WHEEL HOLDER SECC,X15	
7	51.82Y29G001	TAPE 3M J350 10*5mm FOR COLOR WHEEL DP715	

## ASSY BOTTOM COVER MODULE PP1270H5350



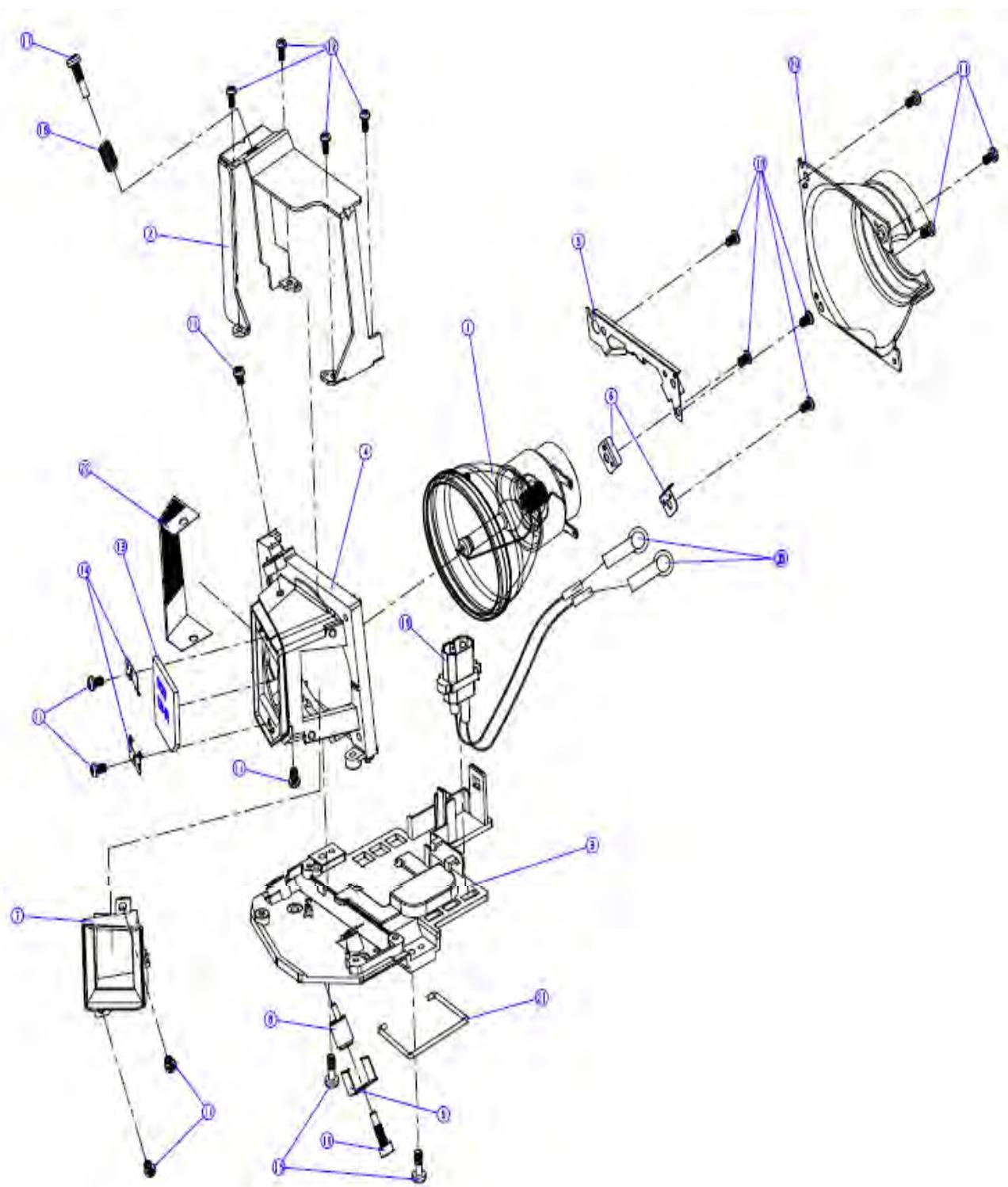
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
	70.8BA14GR01	ASSY BOTTOM COVER MODULE P1266(RMA)	V
1	75.8BA03G002	ASSY BOTTOM COVER FOR K-LOCK P1166	
2	52.8BA03G002	ELEVATOR FOOT P1166	
3	51.8BA10G002	ELEVATOR FOOT PLASTIC P1166	V
4	61.86814G001	ELEVATOR EXTEND SPRING PD120	
5	61.85913G001	ELEVATOR SPRONG SUS304 EP910	
6	51.86810G071	ELEVATOR HOLDER PC+ABS C6200 E	
7	51.8BA09G002	ELEVATOR PUSH BUTTON P1166	V
8	86.00122G015	NUT HEX M2.0*0.4P L15 Ni	
9	52.8BA02G001	ADJUST FOOT P1266	
10	85.1A326G040	SCREW PAN MECH M2.6*4 BLACK	

## ASSY MAIN BOARD MODULE



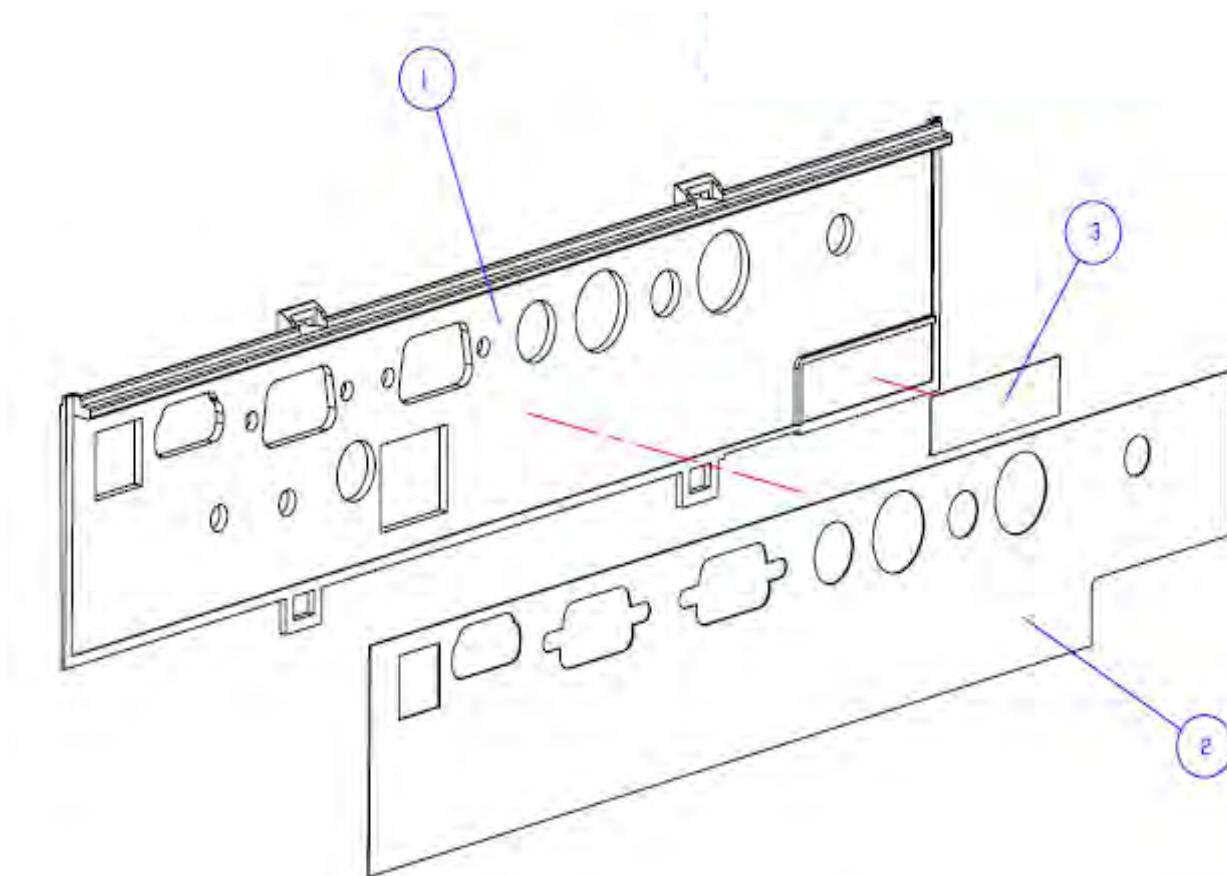
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
	70.8BE06GR01	ASSY MAIN BOARD MODULE P1166 (SERVICE)	V
	70.8BA17GR01	ASSY MAIN BOARD MODULE P1266 (SERVICE)	V
1	80.8BA01G001	PCBA MAIN BD FOR P1266	
1	80.8BE01G001	PCBA MAIN BD FOR P1166	
2	51.8BA19G002	MB TOP MYLAR P1166	
3	41.85E06G002	GASKET W13xH*0.35xL13xMM	
4	41.82G03G003	EMI GASKET USB CONNECTOR W14*	
5	41.82A03G001	BOTTOM COVER EMI GASKET LT20	
6	61.8AE02G001	EMI SPRING HD71	
7	51.8BA20G001	MB MYLAR P1266	

# **ASSY LAMP MODULE**



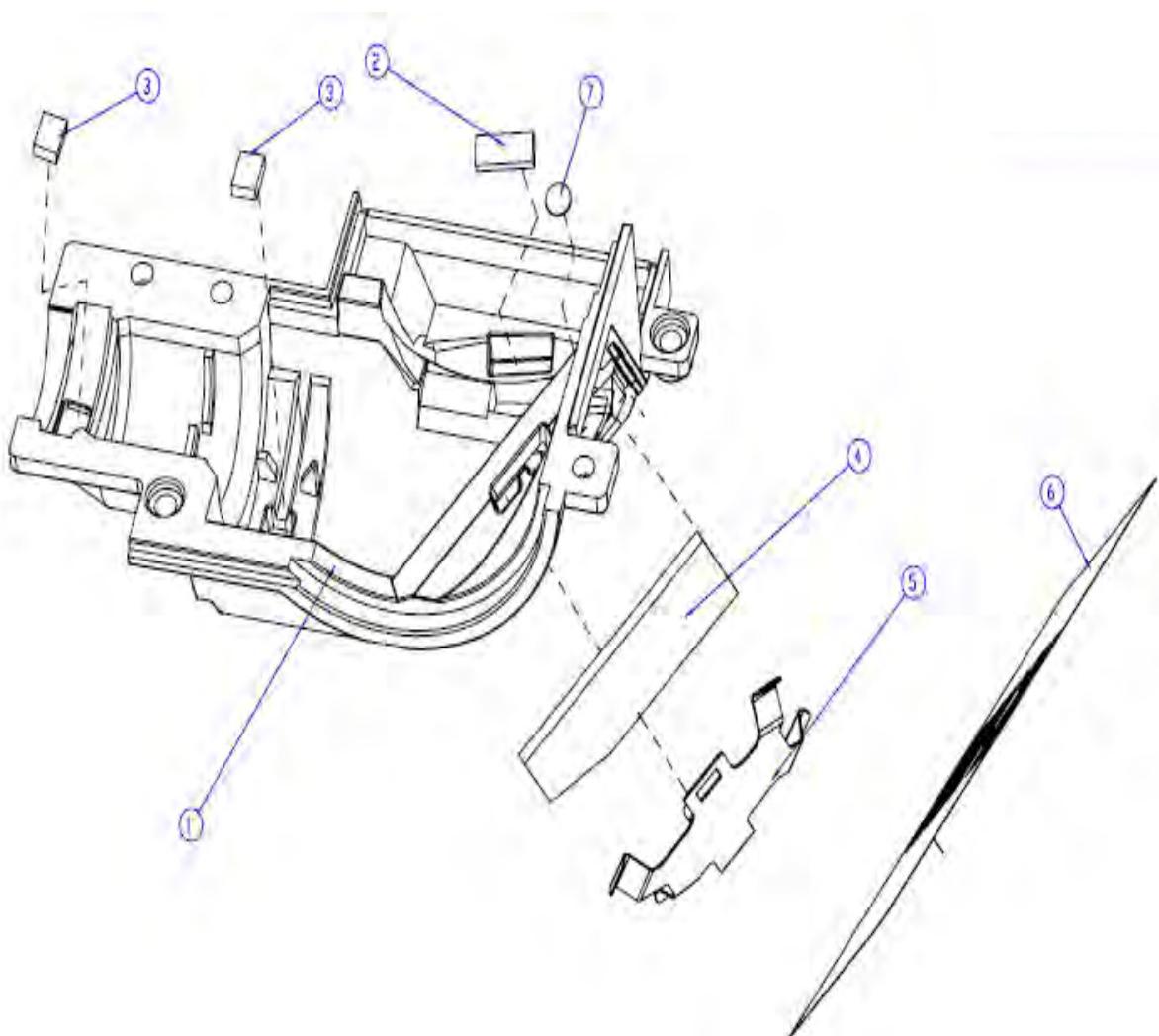
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
	SP.8BE01GC01	LAMP MODULE FOR PROJECTOR P1166/P1266	V
1	23.8BA15G001	LAMP E20.8 180W OSRAM	
2	61.8BA05G002	LAMP TOP HOLDER P1166	
3	51.8BA14G002	LAMP BOTTOM BASE P1270	
4	61.8BA01G001	LAMP HOLDER E20.8 P1266	
5	61.8BA06G001	LAMP CLAMP TOP P1266	
6	61.8BA07G001	LAMP CLAMP BOTTOM P1266	
7	61.8BA11G001	LAMP BLOWER CONNECTOR P1266	
8	61.8BA08G001	LAMP TOOL ROTATION P1266	
9	61.8BA09G001	LAMP TOOL ROTA COVER P1266	
10	85.0A126G040	SCREW DOUBLE FLAT MECH M2.6*4Ni	
11	85.1A626G040	SCREW PAN MECH M2.6*4 BLACK NYLOK	
12	85.1A522G050	SCREW PAN MECH M2*5 Ni NYLOK	
13	23.88N10G001	UV-IR 24*25*2mm(5*5mm cut)_Add Dot ink mark-Oerlikon	
14	61.80L06G001	UVIR SPRING PLATE SUS301 80L	
15	61.00061G001	LOCK SCREW PAN MECH M3*8.5-3.5	
16	61.8BA14G001	SCREW M3x7/25x4 P1266	
17	61.8BA15G001	SCREW M3x27/25x6 P1266	
18	61.8BA16G001	LAMP HOLDER DRIVER SPRING P1266	
19	42.0043DG002	W.A 2P#22 MALE 6KV 125/105MM L	
20	75.8BA02G002	ASSY LIGHTCUT MODULE P1166	
21	61.86808G002	LAMP CHANGER HANDLE SUS304 1.6	
22	61.88T11G011	LAMP MESH SUS301-1/2H 0.2t P12	
23	52.83F12G001	LAMP RUBBER HD72	

## ASSY IO COVER MODULE



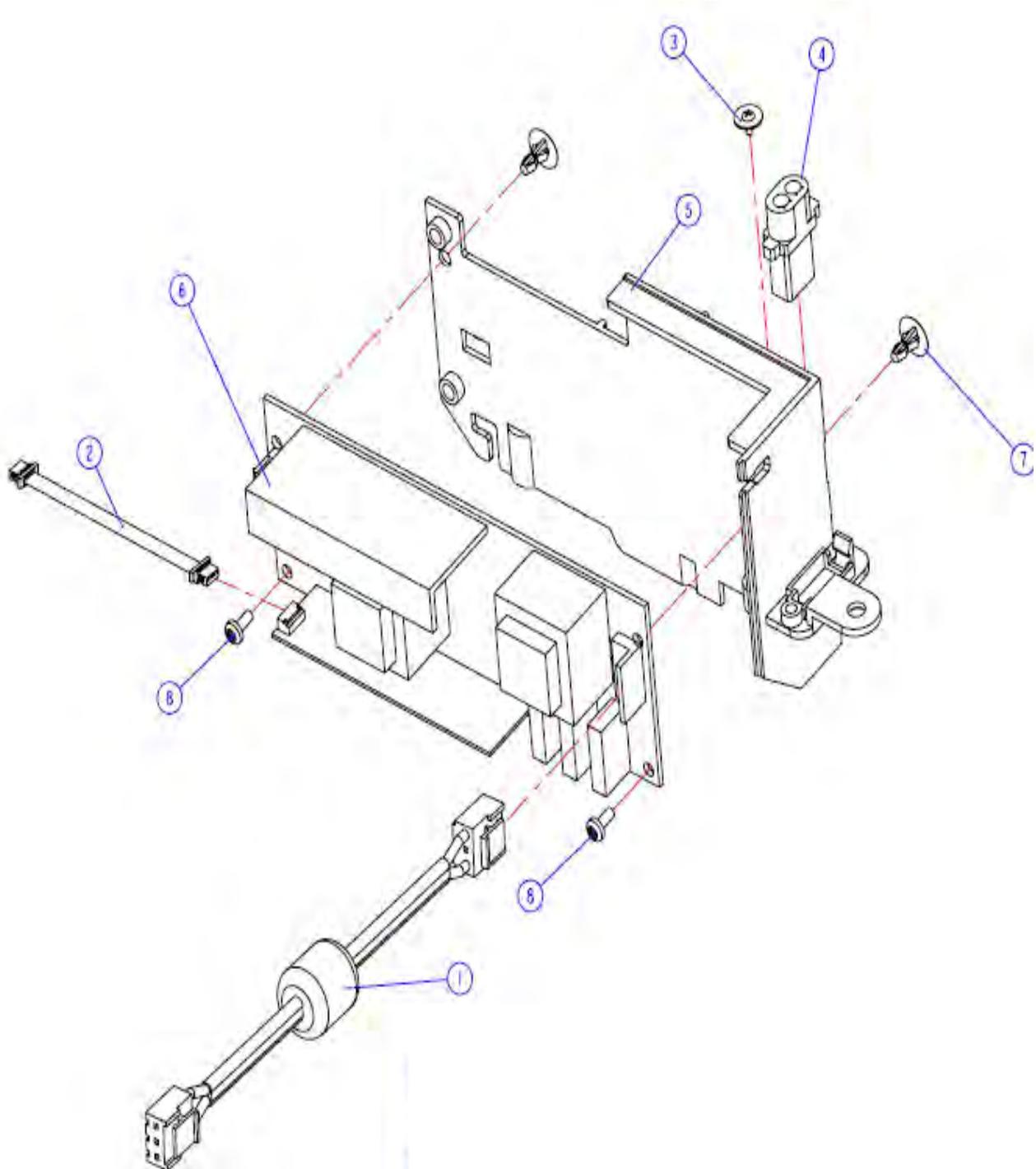
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
	70.8BE07GR01	ASSY IO COVER MODULE P1166 (SERVICE)	V
	70.8BA19GR01	ASSY IO COVER MODULE P1266 (SERVICE)	V
1	51.8BA05G002	DESCRIPTION	
2	35.8BA01G002	IO COVER P1166	
3	35.8BA02G001	MODEL NAME LABEL P1266	
3	35.8BE01G001	MODEL NAME LABEL P1166	

## ASSY ENGINE BOTTOM MODULE



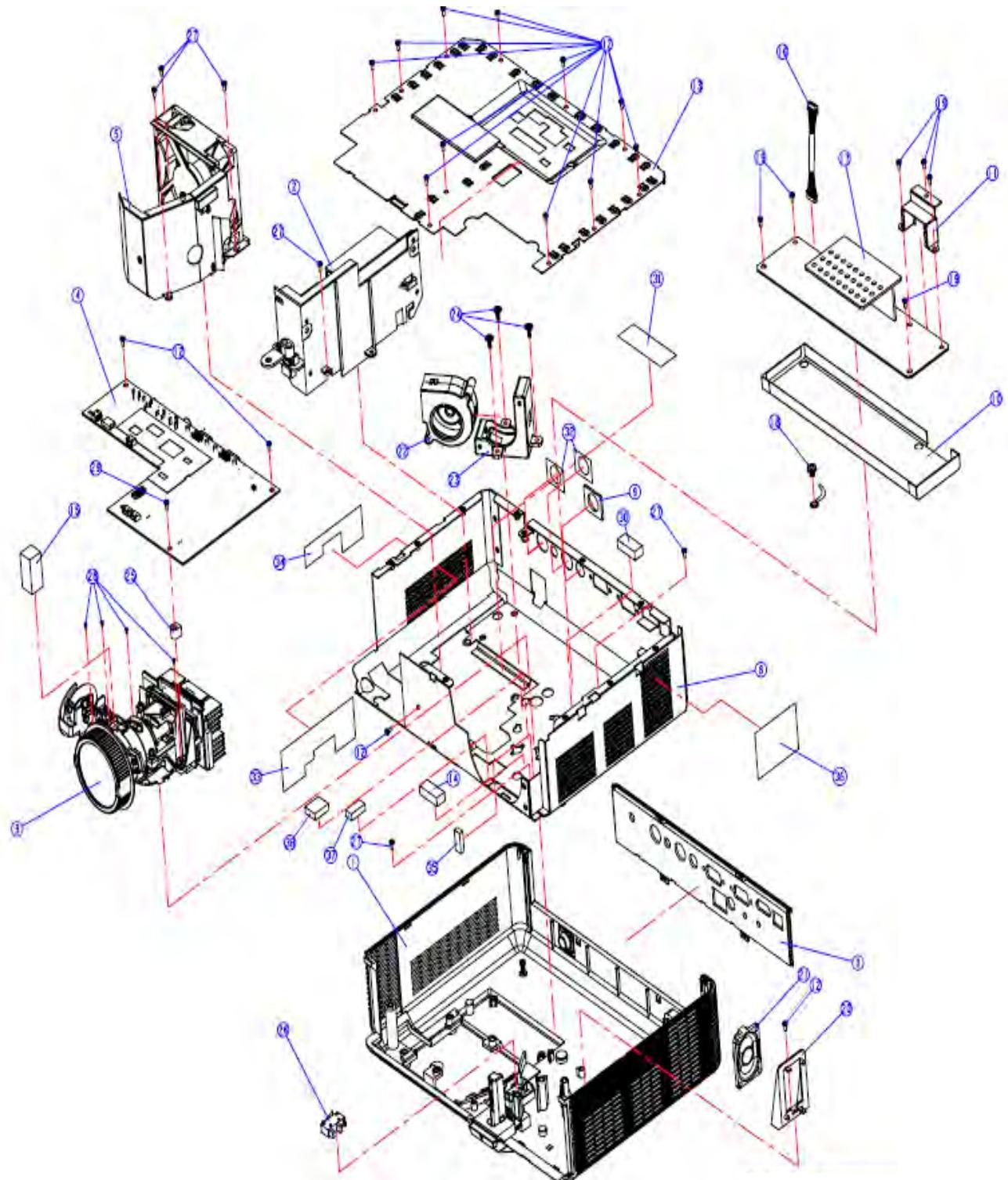
ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
1	51.88N01G001	ENGINE BOTTOM COVER PC945 X15	
2	52.88N05G001	RELAY RUBBER	
3	52.85808G001	PORON LENS BLACK XB31	
4	23.88N02G001	YO MIRROR1 FOR X15	
5	61.88N11G001	MIRROR SPRING SUS301 X15	
6	51.88N29G001	TAPE 3M J1350 FOR MIRROR EP721	
7	51.88N43G001	MYLAR FOR RELAY BOTTOM	

## ASSY LAMP DRIVER MODULE



ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
1	42.81G01G001	CABLE W.A. 2P #20 160mm LAPS T	V
2	42.00422G001	W.A 5P 150mm LAMP DRIVER TO M	V
3	85.3A122G040	SCREW CAP MECH M2*4 Ni	
4	42.0043EG002	W.A. 2P#20 FEMALE 6KV 85MM LAM	
5	51.8BA08G002	LAMP DRIVER HOLDER P1266	
6	75.8BA01G001	ASSY OSRAM LAMP DRIVER O6 MIC	V
7	51.00138G001	SPACER SUPPORT SCK-3A "PINGOOD	
8	85.0A123G050	SCREW P/F MECH M3*5 Ni	

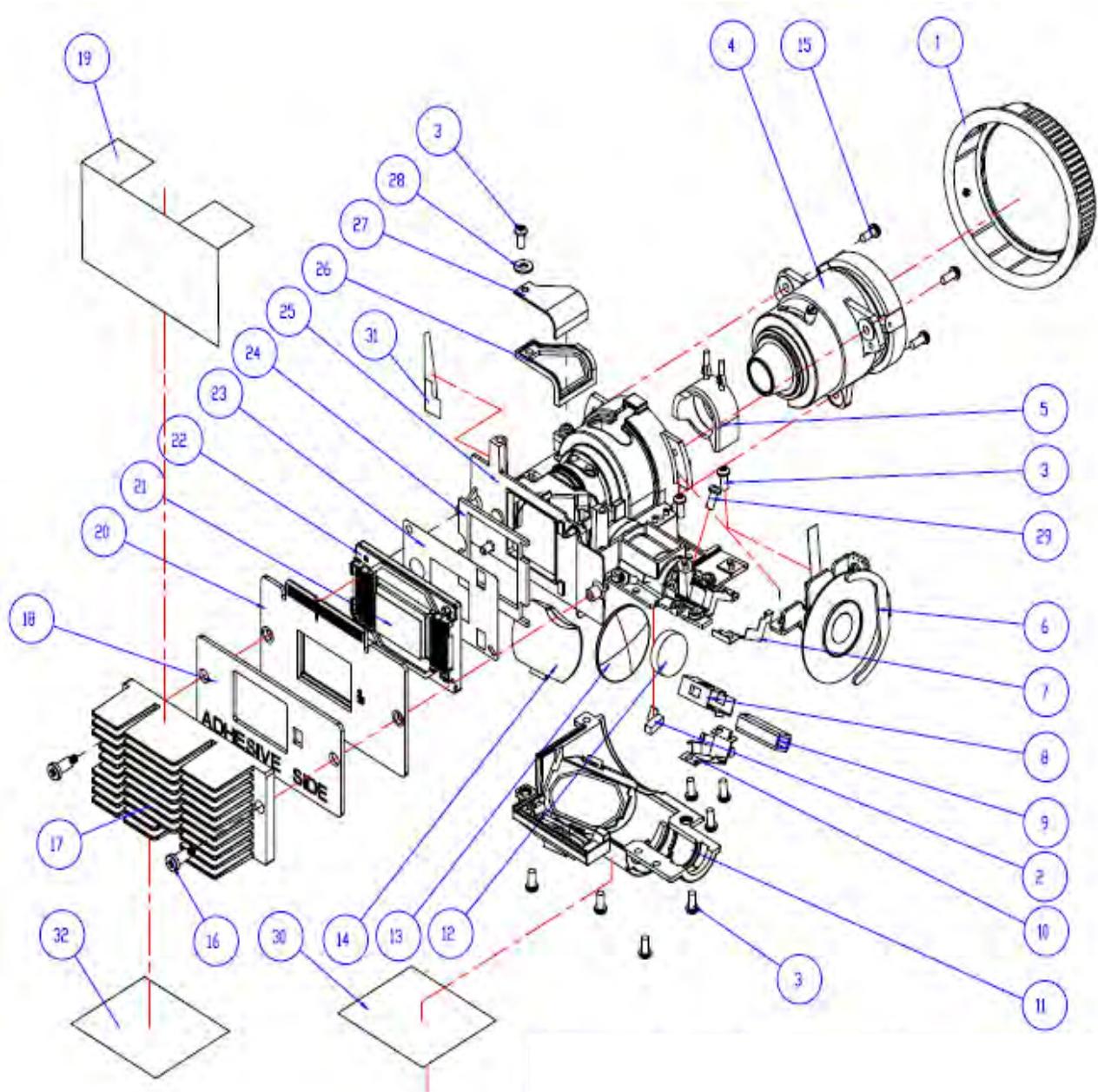
## ASSY BOTTOM HOUSING MODULE



ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
1	70.8BA10G001	ASSY BOTTOM COVER MODULE P1266	
2	70.8BA02G001	ASSY LAMP DRIVER MODULE P1266	
3	70.8BE01G001	ASSY ENGINE MODULE P1166	
3	70.8BA03G001	ASSY ENGINE MODULE P1266	
4	70.8BE02G001	ASSY MAIN BOARD MODULE P1166	
4	70.8BA04G001	ASSY MAIN BOARD MODULE P1266	
5	70.8BA05G001	ASSY FAN SHIELDING MODULE P1266	
6	70.8BE03G001	ASSY IO COVER MODULE P1166	
6	70.8BA11G001	ASSY IO COVER MODULE P1266	
7	51.00001G001	CABLE TIE PG-YJ-80	
8	61.8BA03G002	BOTTOM SHIELDING P1266	
9	41.85Y04G001	EMI I/O GASKET (s-video/RS232	
10	51.8BA17G002	LVPS MULAR P1266	
11	61.8BA10G001	AC BRACKET P1266	
12	85.0A123G050	SCREW P/F MECH M3*5 NI	
13	61.8BA02G002	TOP SHIELDING P1266	
14	41.80W03G001	EMI GASKET 13*8*30mm	
15	41.8BA01G001	EMI GASKET W17*H40*L24.5mm	
16	42.00451G011	W.A. 16P 90mm LVPS TO MAIN BD	V
17	75.8BE01G001	ASSY LVPS MATRITEK 200W P1166	V
18	85.1C224G051	SCREW PAN MECH M4*5 COLOR W/TO	
19	85.1C123G060	SCREW PAN MECH W/T M3*6 NI	
20	51.8BA15G002	SPEAKER BRACKET P1266	
21	49.87K01G001	SPEAKER 8ohm 2W ?16 EP752	
22	49.88N02G002	SUNON 45X20 BLOWER WITH RUB-BER	V
23	52.82G08G001	BLOWER 4520 RUBBER EP7190	
24	85.WD123G080	SCREW PAN TAP 3*8W/WASHER NI	
25	51.8AA21G001	MAIN BROAD SPACER PC LN2520A-1	
26	75.87U02G001	ASSY INTERRUPTER SWITCH P5260	V
27	85.WA123G060	SCREW PAN TAP M3*6 NI	

28	85.1A326G060	SCREW PAN HEAD MECH M2.6*6 BLACK	
29	85.1A323G080	SCREW PAN MECH M3*8 BLACK 'GRE	
30	41.83C01G001	EMI GASKET W13*H15*L40	
31	41.89B02G001	EMI TAPE W*20/L*70	
32	41.85Y04G002	EMI GASKET (S-VIDEO & S-VIDEO)	
33	51.8BA22G001	BOTTOM LEFT INNER MYLAR P1266	
34	51.8BA23G001	BOTTOM LEFT OUTER MYLAR P166	
35	41.82L09G001	EMI GASKET W5*L15*H5mm ARES	
36	51.8BA24G001	BOTTOM RIGHT MYLAR P1266	
37	52.8BA06G001	APOGNE LIGHTCUT-1 P1266	
38	52.8BA07G001	SPONGE LIGHTCUT -2 P1266	

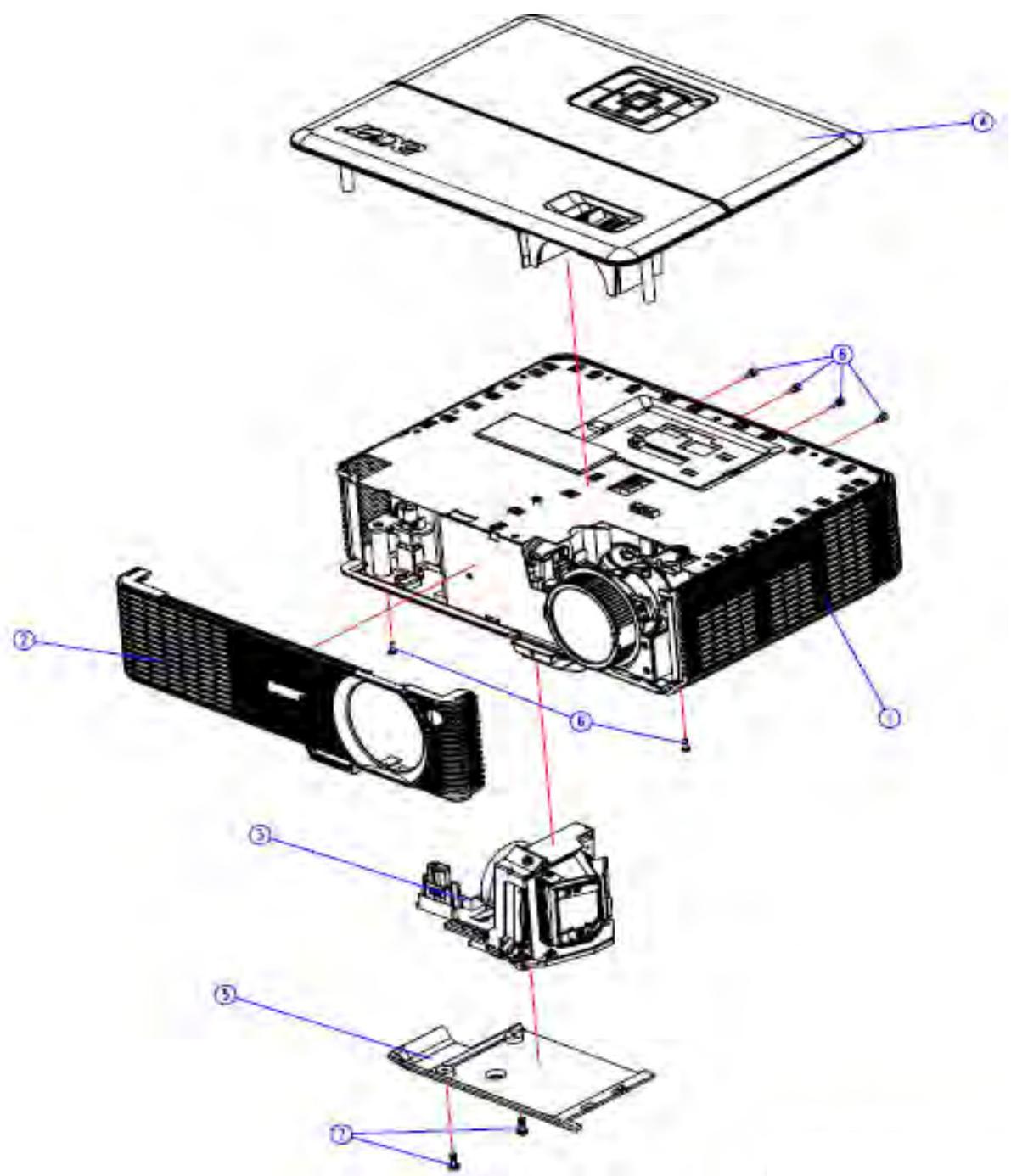
## ASSY ENGINE MODULE



ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
1	51.8BA07G002	FOCUS RING P1266	V
	70.8BA16GR01	ASSY ENGINE MODULE P1266(SERVICE)	V
2	61.88N39G001	STOP MASK MG X15	
3	81.1A126G060	SCREW PAN MECH M2.6*6 Ni	
4	23.8BA01G001	PROJECTION LENS YM25	
5	52.88N02G002	PROJECTION LENS RUBBER NEW X15	
6	70.8BA09G001	ASSY COLOR WHEEL MODULE P1266	
7	61.88N13G002	ROD COVER NEW SUS301 X15	
8	61.88N14G002	ROD HOLDER SUS301 X15	
9	23.88S17G002	YO INTEGRATING ROD FOR X15 5 (5.42*3.72MM)	
10	61.88N12G001	ROD SPRING SUS301,X15	
11	70.88N04G001	ASSY ENGINE BOTTOM COVER EP721	
12	23.88N20G001	YO CONDENSER2 FOR X15	
13	23.88N20G001	YO CONDENSER1 FOR X15	
14	23.88N06G001	YO PLASTIC RELAY FOR X15	
15	85.60426G070	SCREW HEX ZN M2.6 L7MM	
16	85.4A826G118	STEP SCREW FOR TYPEX DMD M2.6*11.8MM, X15	V
17	61.88N03G002	DMD HEAT SINK NEW AL1070 X15	
18	52.88N03G002	HEAT SINK RUBBER(X15) X1160	
19	51.8BA25G001	HEAT SINK MYLAR P1266	
20	80.8BA02G001	PCBA DMD BD ENTEK FOR L:4 ZIF	V
21	52.87J01G001	DMD THERMAL PAD 25*17*0.5t FUJIPOLY SARGON GR-Hn	V
22	48.87M01G001	DMD Type-X 1024x768 PIXEL 0.55' XGA (FOR P1266)	V

22	48.87K01G001	DMD Type-X 800x600 PIXEL 0.55' XGA (FOR P1166)	V
23	61.88N15G001	DMD MASK SUS301,X15	
24	52.88N04G002	DMD RUBBER NEW 1.3T X15	
25	61.88N01G003	ENGINE BASE MG X15	
26	52.88N01G001	OFF RAY RUBBER,X15	
27	61.88N05G001	OFF RAY PLATE AL5052,X15	
28	87.FL030G008	WASHER FLAT 7*3.1*0.8t PC PIN-GOOD WS-1M	
29	85.1A526G060	SCREW PAN MECH M2.6*6 Ni NYLOK	
30	41.89C01G001	EMI TAPE(??) L45*W30	
31	51.8BA26G001	ENGINE LIGHTCUT MYLAR P1266	
32	41.82V02G001	EMI TAPE W 30*L30MM PD120	

## D.C.P1166/P1266



ITEM	PART NO.	DESCRIPTION	SUPPLY PARTS
1	70.8BA01G001	ASSY BOTTOM HOUSING MODULE P1266	
1	70.8BE04G001	ASSY BOTTOM HOUSING MODULE P1166	
2	70.8BA06G001	ASSY FRONT COVER MODULE P1266	
	SP.8BE01GC01	LAMP MODULE FOR PROJECTOR P1166/P1266	V
3	70.8BE05G001	ASSY LAMP MODULE P1266	
4	70.8BA08G001	ASSY TOP COVER MODULE P1266	
5	51.8BA06G002	LAMP COVER P1166	V
6	85.1A323G080	SCREW PAN MECH M3*8 BLACK	
7	61.00018G002	LOCK SCREW PAN MECH M3*8.5-3.5	
8	85.005AGG408	SCREW HEX I/O #4-40 H4*L8 NI	

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# Appendix B

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## I. Serial Number System Definition

Serial Number Format for Projector (take P1166 for example)

**EYJ6901001    820    00000    59    0    1**

(1)                          (2)                          (3)                          (4)                          (5)                          (6)

- (1) : EYJ6901001 = Part Number
- (2) : 820 = Date Code (ex:2008 = 8, the twentieth week of the year = 20)
- (3) : 00000 = Serial Numbers
- (4) : 59 = Manufacturing Code
- (5) : 0 = Version Code
- (6) : 1 = Auto-Language Code

## II. PCBA Code Definition

### PCBA Code for Projector

**A    B    XXX    XXXXXXXXXX    CC    XXX    EEEE**

(1) (2) (3) (4) (5) (6) (7)

(1) : ID

(2) : Vendor Code

(3) : Firmware Version

(4) : P/N

(5) : MB version

(6) : Date Code

(7) : S/N

---

# Appendix C

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## RS232 function command summary table

General command type (Projector “receives” commands)

No	Code (character)	Function feature
1	OKOKOKOKOK	Power On
2	* 0 IR 001	Power On
3	* 0 IR 002	Power Off
4	* 0 IR 004	Keystone
5	* 0 IR 006	Mute
6	* 0 IR 007	Freeze
7	* 0 IR 008	Menu
8	* 0 IR 009	Up
9	* 0 IR 010	Down
10	* 0 IR 011	Right
11	* 0 IR 012	Left
12	* 0 IR 013	Enter (Not supply)
13	* 0 IR 014	Re-Sync
14	* 0 IR 015	Source Analog RGB for D-sub
15	* 0 IR 016	Source Digital RGB (Not supply)
16	* 0 IR 017	Source PbPr for D-sub
17	* 0 IR 018	Source S-Video
18	* 0 IR 019	Source Composite Video
19	* 0 IR 020	Source Component Video
20	* 0 IR 021	Aspect ratio 16:9
21	* 0 IR 022	Aspect ratio 4:3
22	* 0 IR 023	Volume +
23	* 0 IR 024	Volume -
24	* 0 IR 025	Brightness
25	* 0 IR 026	Contrast
26	* 0 IR 027	Color Temperature
27	* 0 IR 028	Source Analog RGB for DVI Port (Not supply)
28	* 0 IR 029	Source Analog YPbPr for DVI Port (Not supply)
29	* 0 IR 030	Hide
30	* 0 IR 031	Source
31	* 0 IR 032	Video: Color saturation adjustment
32	* 0 IR 033	Video: Hue adjustment

No	Code (character)	Function feature
33	* 0 IR 034	Video: Sharpness adjustment
34	* 0 IR 035	Query Model name
35	* 0 IR 036	Query Native display resolution
36	* 0 IR 037	Query company name
37	* 0 IR 040	Aspect ratioL.Box (Not supply)
38	* 0 IR 041	Aspect ratio 1:1 (Not supply)
39	* 0 IR 042	Keystone Up
40	* 0 IR 043	Keystone Down
41	* 0 IR 044	Keystone Left (Not supply)
42	* 0 IR 045	Keystone Right (Not supply)
43	* 0 IR 046	Zoom
44	* 0 IR 047	e-Key
45	* 0 IR 048	Color RGB
46	* 0 IR 049	Language
47	* 0 IR 050	Source HDMI